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## A Gazetteer to Accompany the "Insecta" Volumes of the "Biologia Centrali-Americana"

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### INTRODUCTION

The present work is a gazetteer of the Mexican and Central American localities from which insects are recorded in the "Biologia Centrali-Americana." It consists principally of definitions of names of localities, given in enough detail so that the geographic position of any locality can be determined readily on a map of only moderate detail. Secondly, it provides a consistent treatment of the names of the localities, following current usage. Finally, it includes at least an approximation of the elevation above sea level of most specific inland localities.

The gazetteer is offered primarily for the use of systematists studying the distribution and geographic variation of insects in México and Central America. It should be useful to workers in fields other than entomology, however, because many of the localities cited for insects in the "Biologia" are also cited for other animals and for plants. In this connection, we hope that some of our colleagues who use the gazetteer will undertake a supplement to complete the treatment of all the Mexican and Central American localities in the "Biologia."

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## THE "BIOLOGIA CENTRALI-AMERICANA"

**HISTORY:** The extremely interesting history of the "Biologia" has never been adequately related in the literature, and it would be impossible to do justice to it in the introduction to this gazetteer. Nevertheless, we feel that it is appropriate to include some background information. For further details the reader is referred to the historical account written by Godman for the "Introductory Volume" of the "Biologia," to the articles on the "Biologia" by Calvert (1916), and to the biographic sketches of Godman, Salvin, Champion, Flohr, Sallé, and others closely associated with the "Biologia" project listed in Carpenter (1945).

The "Biologia Centrali-Americana," unquestionably one of the most monumental and important faunal works ever published, was the product of the exciting era of world travel and exploration that began in the time of Linnaeus and reached its zenith with the discovery of the principles of organic evolution by Darwin and Wallace. Its history is very intimately associated with the lives of its two organizers, directors, and editors, the eminent British naturalists Frederick DuCane Godman and Osbert Salvin.

Godman was born in 1834; Salvin, a year later. Both men were educated at Cambridge University, where in 1853 they met and developed a close friendship that was to last until the death of Salvin 44 years later. As students both were very active in natural history, specializing in the study of birds and butterflies. In 1858 they joined a group of fellow students in founding the British Ornithological Union, which a year later began publication of the journal *The Ibis*.

From the outset of their careers, both Godman and Salvin had a great interest in traveling and collecting. During his life Godman visited India, the Azores, Madeira Island, the Canary Islands, Guatemala, Jamaica, México, and most of the countries of Europe. Immediately after being graduated from Cambridge in 1857, Salvin made an expedition of five months to Tunisia and eastern Algeria, and in the autumn of the same year he first visited Central America, where he collected in Guatemala. In all, he made four visits to Guatemala, including one in 1861 with Godman and a last one in 1873 with his wife. Godman, who was independently wealthy, apparently never held a salaried position in biology. Salvin served as Curator of the Strickland Collection of Birds at Cambridge University from 1874 until 1883. Both men were later to contribute heavily to the financial support of the "Biologia" series.

Godman and Salvin apparently pooled their collections while still at Cambridge. From about 1865 on, they maintained a joint museum at various addresses in London, where, according to Godman's account

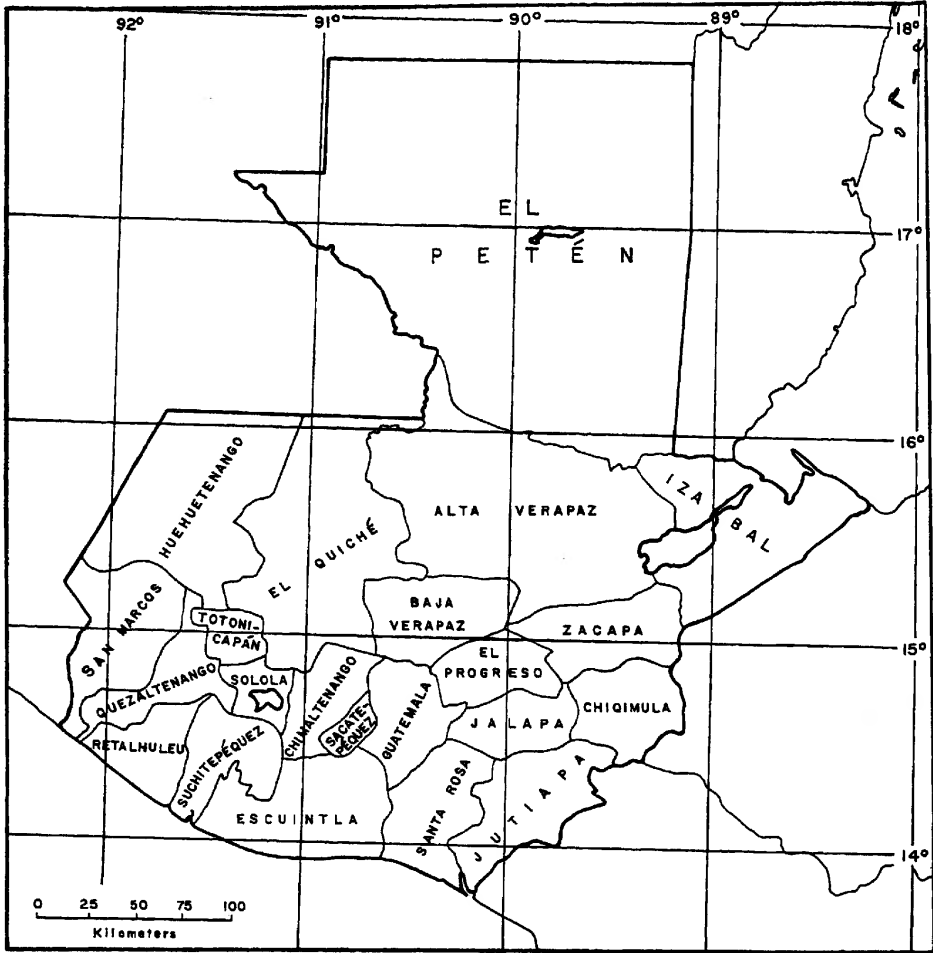


FIG. 2. Major political divisions of Guatemala.

("Introductory Volume," p. 6), "we spent the greater part of the week . . . arranging our collections, publishing papers on them, and attending meetings of the various scientific societies of which we were both members." Aside from their work with the "Biologia," both men were extremely active and influential in British natural history during most of their lives. Both became fellows of the Royal, Linnean, Zoological, and Entomological societies of London, and both published extensively on their research activities.

Although Evans (1909) states that Godman and Salvin read Darwin with intense interest and that "shortly afterwards it occurred to them that a careful examination of the fauna and flora of Central America

would throw some light on the then much-discussed subject of the distribution of species and its bearing on evolution," it was not until 1876 that definite plans were formulated and work on the "Biologia" was begun. The biogeographic and evolutionary aspects of the "Biologia" were never developed to the extent that the editors had hoped, owing in part to the gigantic proportions of the undertaking as well as to the inadequacy of knowledge of the fauna and flora of surrounding regions. Still, the "Biologia" is an incomparable contribution to the study of the natural history of the New World, and it did much to lay the foundation for the study of the biogeography of this area.

The editors reserved the treatment of the birds and butterflies in the "Biologia" for themselves and assigned the other groups, so far as possible, to the best available specialists. In all, 51 contributors were involved. No effort was spared to supply contributors with material for their work. In addition to the specimens that they collected on their various expeditions, Godman and Salvin purchased for use in the "Biologia" many of the important bird and insect collections of the day and hired several collectors to obtain Mexican and Central American specimens. Early in the project they sent George Charles Champion, who was to become one of the outstanding British coleopterists, to collect in Central America, and upon his return Godman employed him as his secretary and as subeditor of the "Biologia." Champion, in addition to writing (alone and with others) nine books of the "Biologia" series, seems to have had charge of the preparation and distribution of the collections and the actual editing of the text through most of the period during which the "Biologia" was issued.

Publication of the "Biologia" continued regularly over a period of 36 years, during which time material was constantly being added to the collection, frequently necessitating extensive supplements to parts already published. In some cases specialists originally assigned a group were forced to abandon their tasks, and new contributors had to be located. Certain groups, such as the Crustacea and most of the lower invertebrates, were never treated owing to a lack of material, while a number of groups of insects were omitted because no workers could be found to undertake them. The death of Salvin in 1898 seriously delayed the completion of the "Biologia," but the work was carried on by Godman and Champion and was officially brought to a close in 1915 by the publication of Godman's "Introductory Volume." Godman died in 1919; Champion, in 1927.

THE "BIOLOGIA" COLLECTION: As indicated above, the collection of specimens amassed by Godman and Salvin for the "Biologia" was

derived from several sources. Chief among these were the collections personally purchased by them and the collections made by collectors employed by them. In the insects the major purchases were collections of butterflies of H. W. Bates and H. Druce and collections of various groups of Mexican and Central American beetles of Sallé, Höge, Janson, Boucard, Forrer, Baly, Van Patten, Biolley, Gaumer, Conradt, F. Bates, and many others. Individuals who collected specifically for the "Biologia" were, in addition to Champion, H. Rogers, E. Arcé, W. B. Richardson, F. B. Armstrong, W. Lloyd, H. H. Smith and his wife, and M. Trujillo. The "Biologia" collection, containing several hundred thousand specimens, was ultimately given to the British Museum (Natural History), of which Godman became a trustee. Over a period of years it was incorporated into the collections of that museum, the work being partially supported financially by Godman himself. Through subsequent exchange, some of the specimens have been distributed to other museums, but the great bulk of the "Biologia" collection is still housed in the British Museum.

Much of the older material purchased for the "Biologia" is poorly labeled; often only the country of origin is given. Not infrequently specific localities for the older material are not sufficiently identified, and they constitute a good proportion of those that we have been unable to find.

Material collected specifically for the "Biologia" was usually carefully labeled with the name of the settlement or physiographic feature at or near which collections were made. This fact adds considerably to the value of the "Biologia," but, owing to several factors, people who refer to it are apt to have difficulty in taking full advantage of the distributional data that it contains. In the first place, a lack of consistency in the use of names of localities in the text has produced much synonymy as well as ambiguity. Second, for many localities the political subdivision of the country is never given in the "Biologia," while for others this information is given in some places and not in others. Third, subsequent changes of name have made some of the localities difficult to identify properly. However, the chief difficulty in identifying and finding "Biologia" localities arises from the fact that a great many of them are obscure villages, railroad stations, and other stopping places. The collectors of the "Biologia" material traveled mainly on foot, by muleback or horseback, or by stage-coach; in México and Panamá they also commonly used the limited system of railroad lines then available. With the numerous changes in modes and routes of transportation that have been made in the nearly 50 years since the "Biologia" was completed, even some of the more

familiar localities for early travelers do not appear on modern maps. Unfortunately, little information is available on the itineraries of the collectors of insects other than Godman, Salvin, Champion, and Calvert.

An analysis of the distribution of localities from which insects are recorded in the "Biologia" will be of interest to users of this gazetteer, inasmuch as the degree of geographic concentration of localities is probably a fair indication of the degree of coverage of an area by collectors. The present analysis is confined to those localities that we have been able to place in political divisions of their respective countries. The gazetteer lists a total of 790 such localities. Of these, 450 are in México and 340 in Central America.

In México, there are records of insects from every political division except the state of Tlaxcala and the territory of Quintana Roo. Collectors worked the southern part of the country very heavily, particularly the region extending from Veracruz on the Atlantic coast to Guerrero on the Pacific coast. The southern half of the country has three times as many localities cited in the gazetteer as the northern half. The political divisions with the heaviest concentrations of localities in relation to area are Veracruz, Morelos, and the Distrito Federal.

The distribution of the Central American localities by country is as follows: Guatemala, 128; British Honduras, eight; Honduras, six; El Salvador, five; Nicaragua, 32; Costa Rica, 99; and Panamá, 62. The densest distribution of localities is in Costa Rica; Guatemala is second in this respect; and Panamá is a close third. The density of distribution in these three countries is of the same general order as that in the more heavily collected Mexican states. On an area basis, the least-collected of the Central American countries is Honduras.

There are clear-cut patterns of density of distribution of localities in several of the countries in Central America. Thus, in Guatemala, the distribution is primarily central and southwestern, 55 per cent of the localities being in the departments of Alta Verapaz, Baja Verapaz, Guatemala, Sacatepéquez, and Escuintla. In Honduras and Nicaragua the localities are concentrated largely in the west. Costa Rica has the heaviest concentration in its central part, especially in the provinces of San José and Cartago, the localities of which account for 52 per cent of the total for the country. Finally, Panamá has a fairly general distribution of localities except for heavy concentrations in the provinces of Chiriquí and Panamá and in the Canal Zone.

ORGANIZATION AND CONTENT: The "Biologia Centrali-Americana," subtitled "Contributions to the knowledge of the fauna and flora of Mexico and Central America," was published for the editors by Dulau

and Company of London. It was issued on a subscription basis in 257 parts, the first of which appeared in September, 1879, and the last in June, 1915. Each part (not to be confused with "parts" of "Biologia" volumes, which are separate books) consisted usually of 12 pages of text and six plates. Parts were so marked and paged that they could be

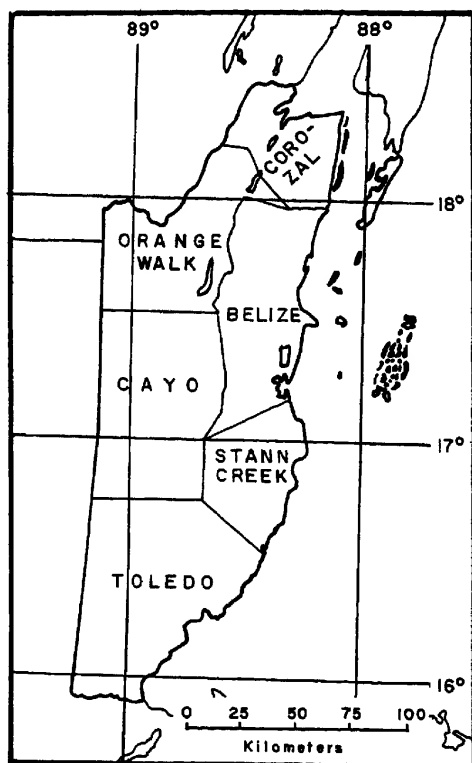


FIG. 3. Major political divisions of British Honduras.

assembled ultimately into books of related matter having separate pagination. Including the "Introductory Volume," a total of 67 such books was published.<sup>1</sup> Fifty-two of these deal with subjects in zoology, five with botany, and nine with archeology. In zoology, one book each is devoted to Mammalia, Reptilia and Batrachia, Pisces, Mollusca, and Chilopoda and Diplopoda. Four books each are concerned with Aves

<sup>1</sup> The system of numbering and titling the books of the "Biologia" is complicated and ambiguous. Godman, in his summary and analysis of the "Biologia" ("Introductory Volume," pp. 56-86), arrives at a total of 63 books by arbitrarily combining some of them. If separate pagination is used as the criterion for a book, the total is actually 67.



and Arachnida; and the remaining 39, with Insecta. The heavy emphasis on insects in the "Biologia" indicated by these figures is further emphasized by the fact that insects account for nearly 87 per cent of the 38,637 nominal species of animals treated and 94 per cent of the 19,067 species described as new.

Among the books on insects there are 18 on Coleoptera (arranged in seven volumes, all but two of which have two or more parts); four on Lepidoptera Heterocera; three each on Hymenoptera, Diptera, Lepidoptera Rhopalocera, and Rhynchota Homoptera (two volumes, one

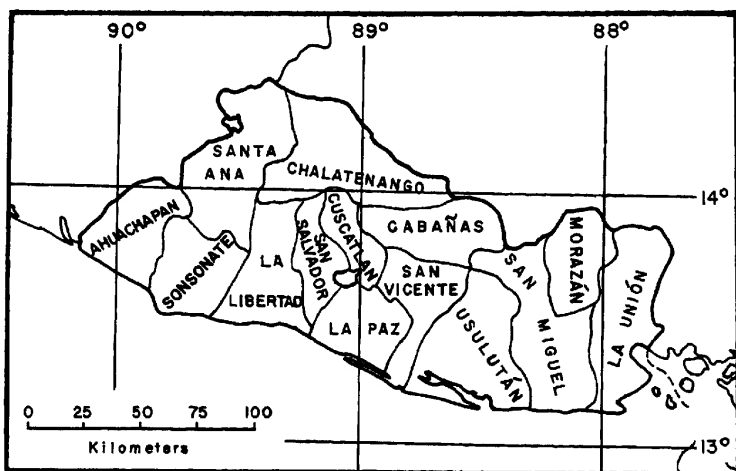


FIG. 4. Major political divisions of El Salvador.

with two parts); two each on Rhynchota Heteroptera and Orthoptera; and one on Neuroptera (actually Ephemeroptera and Odonata).

#### PREPARATION OF THE GAZETTEER

The task of preparing the gazetteer has been shared equally by us since its inception early in 1956. At that time it was decided that one of us (Selander) would be responsible for the treatment of the localities in México and the other (Vaurie) for the localities in the Central American republics. The details of procedure, format, and style were worked out largely through correspondence. The maps were drawn by Selander.

Our general procedure was as follows. Each of us independently examined all the volumes on insects of the "Biologia" for the names of localities within his or her geographic area and placed the name of each locality on a separate file card, together with one or more citations of

the use of the name in the "Biologia," for possible future reference. Variants of names were recorded except for unintentional misspellings corrected in the book in which they appeared. The political division of the country to which a locality belongs and the name of the collector were noted if given. Localities were then defined on the basis of the principal reference materials discussed below or, in the case of obscure localities and others involving special problems, by the use of one or more specialized references. Neither of us made an intensive, organized search of the literature for references of the latter sort, although we did make use of whatever materials came to our attention.

REFERENCES: Citation of the "Biologia Centrali-Americana" in the present paper is by book title (subject, volume number, and part) or map number. All other citations of literature are by author or sponsoring organization and refer to the terminal bibliography.

The principal maps used in the preparation of the gazetteer were the "Map of Hispanic America" (American Geographical Society, 1923-1952) and the "World aeronautical charts" (United States Air Force, 1951-1956). The principal gazetteers used were the "Index to Map of Hispanic America" (American Geographical Society, 1943, 1944) and the Mexican and Central American gazetteers of the United States Board on Geographic Names (1956). A number of additional, for the most part specialized, publications were also consulted, as discussed below.

Special mention must be made of the aids to identification of localities found in the "Biologia Centrali-Americana" itself. Of most importance among these is the series of maps in the "Introductory Volume." Maps 3 to 7 of this series, representing México and the Central American republics on the scale of 1:3,000,000, show many of the "Biologia" localities; however, they omit many of them, and most of the localities shown are not "Biologia" localities. Their main value lies in the fact that they were contemporaneous with the "Biologia" text. They were frequently consulted by us, particularly in connection with ambiguous names of localities. The "Introductory Volume" of the "Biologia" also contains a list of the collectors for the "Biologia" and an account of Champion's itinerary in Central America, an earlier version of which was published by Champion in 1907. Finally, the Neuroptera volume of the "Biologia" has a useful gazetteer of localities for Odonata prepared by Calvert. Since the "Biologia" was completed, the only study of its localities that has been published, so far as we know, is the Vauries' account (Vaurie and Vaurie, 1949) of their attempt to revisit and collect at the Guatemalan localities visited by Champion.

For both México and Central America, the "Map of Mexico and Central America" of the National Geographic Society (1953) and the "Columbia Lippincott gazetteer of the world" (Seltzer, 1952) were useful for general reference. The gazetteer prepared by Hooper (1952) for his monograph of the harvest mice of Latin America provided information on a number of obscure localities.

For México in general, the travel guides and maps of the Compañía Huelera Euzkadi, S. A. (1954, 1958), and the American Automobile Association (1959) were of assistance, as were the individual maps of states and territories published by the Dirección de Geografía y Meteorología, Estados Unidos Mexicanos (1954). Detailed coverage of the peninsula of Baja California was obtained from the maps of the Automobile Club of Southern California (195-) and Michelbacher and Ross (1942) and the itinerary and maps of the early naturalist Eisen (1895). Some additional works consulted in connection with Mexican localities include the itineraries of the "Biologia" collectors Calvert (1907) and McClendon (1906) and the valuable account of collecting localities of Goldman (1951). Background information on México at the turn of the century was found in the works of Bartholomew (1919), Gadow (1908), Lumholtz (1912), and several other early travelers.

For the Central American republics of Guatemala, Honduras, Nicaragua, Costa Rica, and Panamá, the road maps of the Esso Standard Oil, Sociedad Anónima (1950), served as important supplements to our other maps. An early edition of the Rand McNally and Company's (1915) "Commercial atlas of America" showed several Central American localities not found on other maps. Additional references consulted include the geographic study of Sapper (1901), the itinerary of Champion already cited, and the map on the scale of 1:750,000 of the Dirección General de Cartografía (1958), for Guatemala; the paper on localities in British Honduras of Allen, Ross, and Neill (1959); the itinerary of Calvert (1913) and the systematic studies of Carriker (1910) and Wolcott (1927) for Costa Rica; and the account of travels of Festa (1909) and the reports of Dyar (1914) and Goldman (1912) for Panamá.

**TREATMENT OF NAMES OF LOCALITIES:** Names of localities are arranged in the gazetteer in strict alphabetical order, all elements of the names being considered in alphabetizing, including articles, prepositions, and words denoting physiographic features. Thus, for example, La Venta is listed as such and not as Venta, La; and Boca del Simón precedes Boca Nueva. Each name is followed by a definition, a cross reference to a name carrying a definition, or a statement that the locality to which the name refers was either not located or not identified.

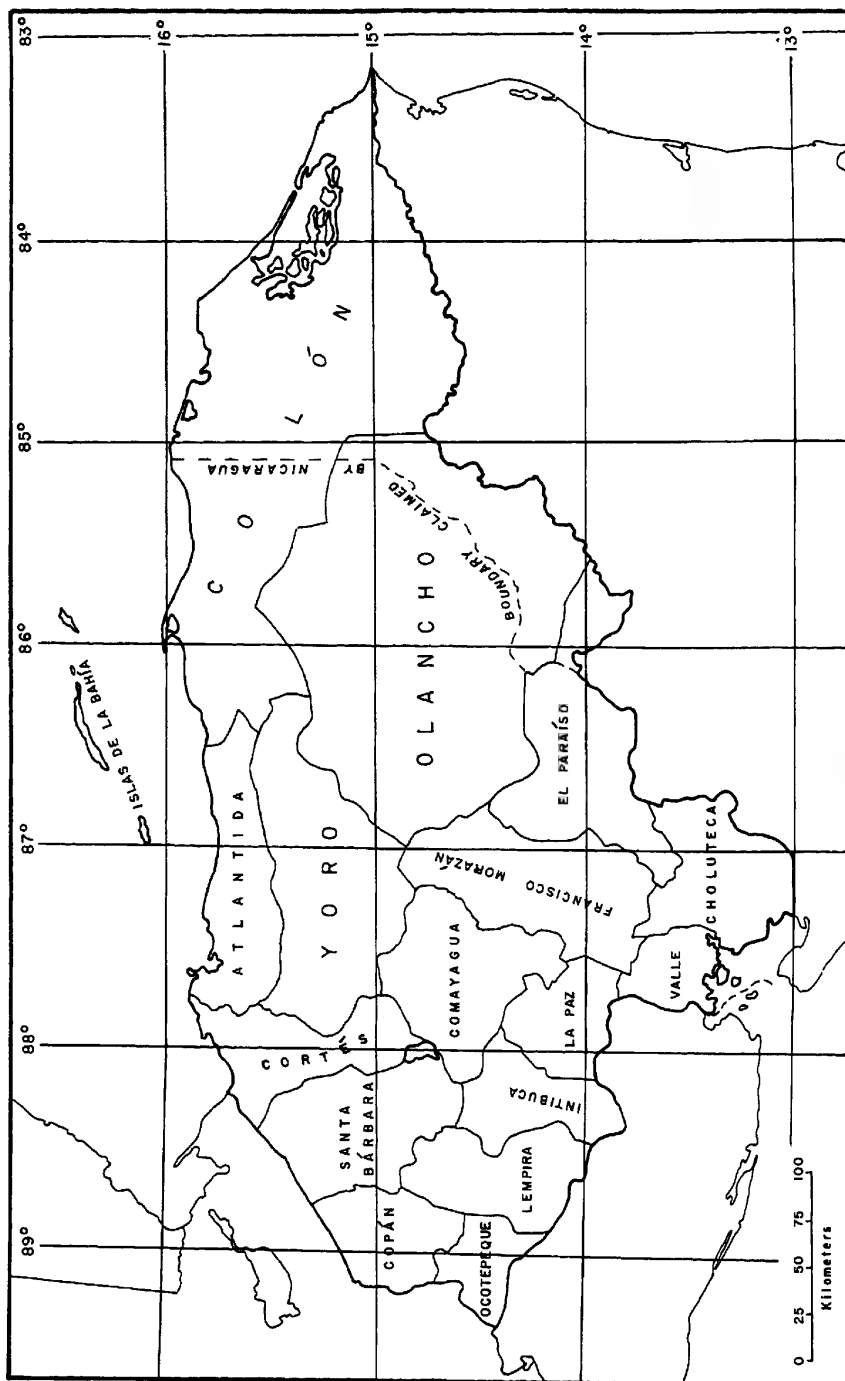


FIG. 5. Major political divisions of Honduras.

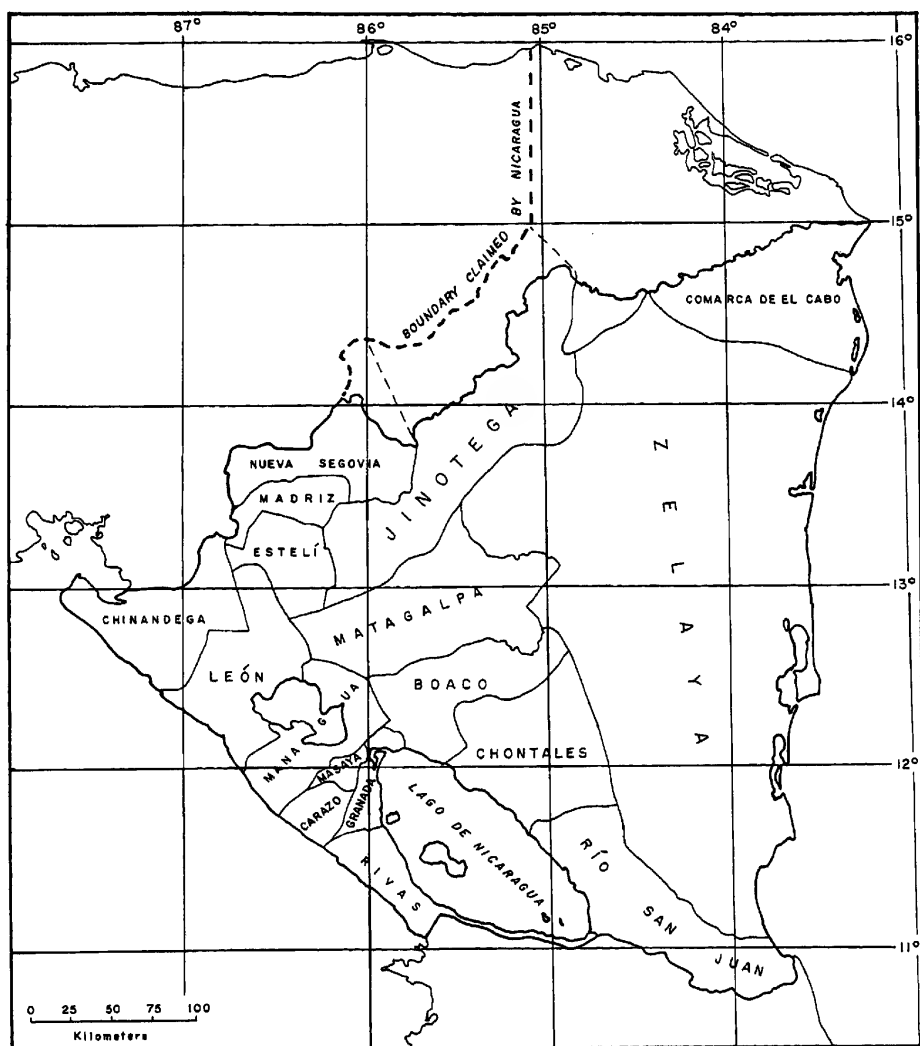


FIG. 6. Major political divisions of Nicaragua.

As the authority for usage and spelling of names of localities in México, Honduras, British Honduras, El Salvador, Nicaragua, and Costa Rica, we used the gazetteers of the United States Board on Geographic Names. For the names of localities in Guatemala and Panamá, countries for which gazetteers in this series have not as yet been published, we generally adopted the usage and spelling given in the "Index to Map of Hispanic America." These references generally list a single accepted name for each village, town, city, or physiographic feature. The only

exception to this rule is that the United States Board on Geographic Names frequently accepts the use of both an extended, official form of a name as well as a shorter, vernacular form. For example, the capital of the Mexican state of Guerrero is officially known as Chilpancingo de los Bravos, but in México it is usually called simply Chilpancingo, and both forms are accepted by the United States Board on Geographic Names. In such cases, we invariably adopted the shorter form of the name.

All names and variants of names for Mexican and Central American localities are listed in the gazetteer exactly as they appear in the "Biologia," except that proper diacritical marks, which are almost always omitted in the "Biologia," have been added, and occasional modifications of capitalization have been made. If a locality is cited in the "Biologia" by an accepted name, the definition of the name is given immediately following it. If a locality is cited in the "Biologia" only by an obsolete name or variant of an accepted name, the accepted name or form of the name and the definition are given following the "Biologia" name and separated from it by an equals sign (e.g., Omilteme = Omiltemi, Guerrero, México . . .). In the first case any obsolete names or variants, and in the second case any additional obsolete names or variants, are appropriately cross referenced (e.g., Panciná. See Panimá).

**DEFINITIONS:** Definitions of names of localities in the gazetteer generally follow a single pattern. The first element of a definition is the name of the major political division of the country and the name of the country in which the locality is found. Major political divisions are called states, or (in the case of Baja California Sur and Quintana Roo) territories, in México; departments, in Guatemala, Honduras, El Salvador, and Nicaragua; districts, in British Honduras; and provinces, in Costa Rica and Panamá.

The second element of a definition is a statement of the nature of the locality in question (city, lake, mountain, and so on) and sufficient information, where necessary, to enable the user of the gazetteer to find the approximate position of the locality on a map of relatively small scale, such as a road map. As indicated above, it is anticipated that people who use this gazetteer will be interested primarily in identifying "Biologia" localities in order to add them to distributional maps for species of insects. We have found road maps ideal for this sort of work, because the small size of most outline maps used for distributional plotting renders superfluous any great preciseness in the placing of localities. Furthermore, road maps are likely to be used by workers intending to visit "Biologia" localities. All distances between points recorded in the gazetteer were

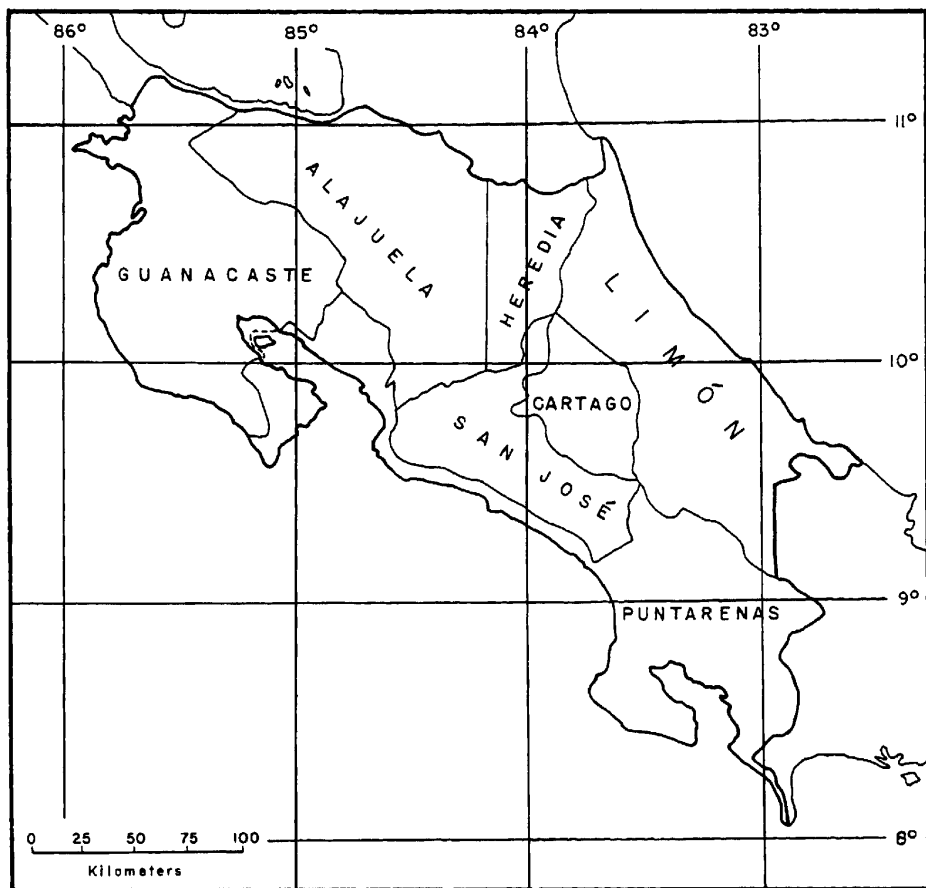


FIG. 7. Major political divisions of Costa Rica.

measured in a straight line, generally on maps of the scale 1:1,000,000. Often these distances vary considerably from distances between points *via* road or railroad.

Some definitions are amplified by additional information or explanation. If we were unable to associate a name with a locality within the area specified in the "Biologia," the phrase "not located" is used. On the other hand, if there is unresolved ambiguity as to which of two or more localities a "Biologia" name applies, the phrase "not identified" is used.

In the treatment of names that are ambiguous, the factor of subjectivity inherent in any undertaking such as the present gazetteer is particularly strong. Actually, however, many cases of technical ambiguity in the "Biologia" can be resolved with considerable assurance through a knowl-

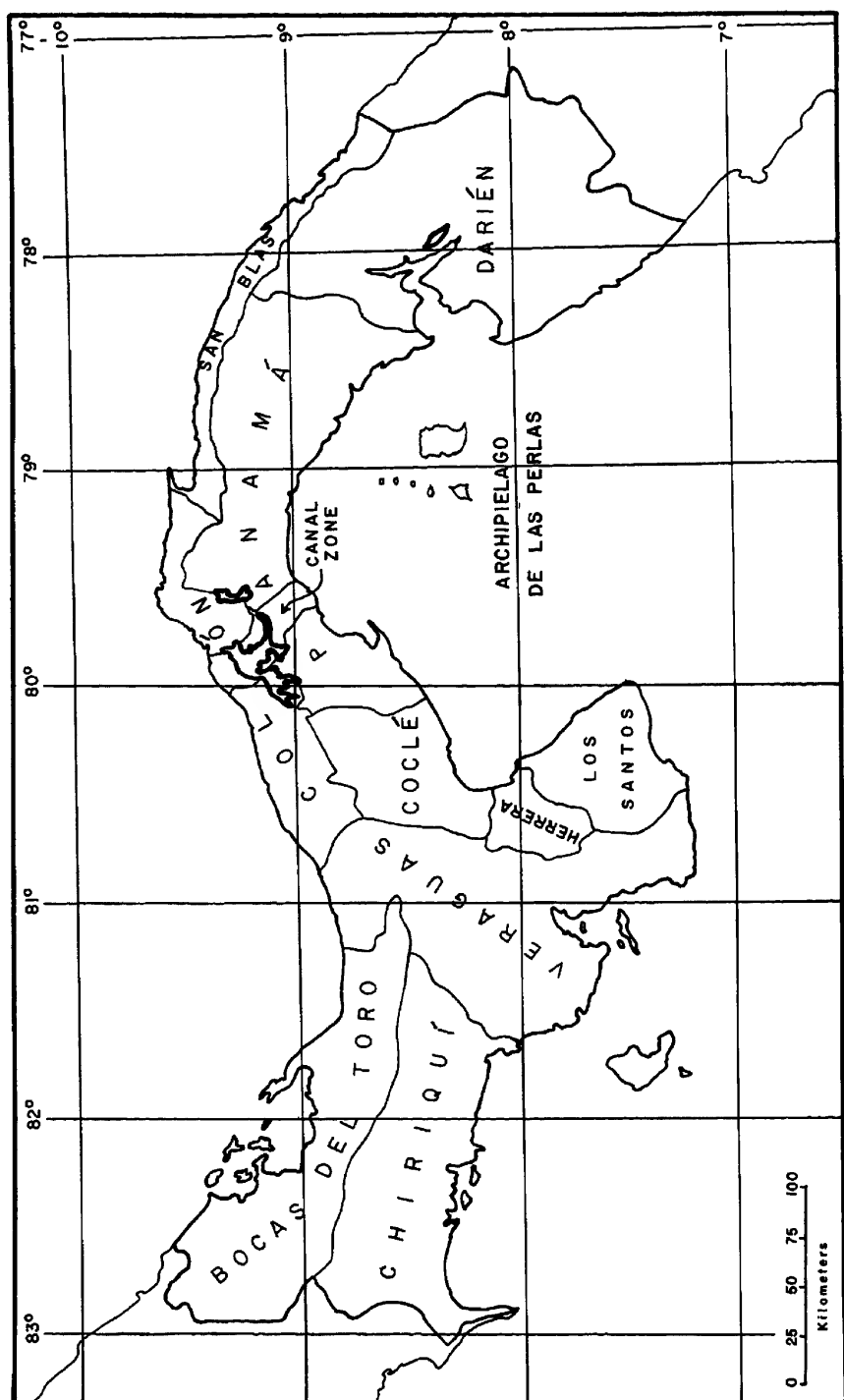


FIG. 8. Major political divisions of Panamá.



edge of the main transportation routes in early times, the itineraries of collectors, and similar historical clues. In other cases, depending on the evidence available, the chances of making correct identifications of localities are much less. In still others, there is really no basis at all for decision. Whenever we have made a doubtful decision as to the identity of an ambiguous name, a general estimate of the degree of probability of the correctness of the decision is given.

Many of the definitions contain, as a third element, the elevation of the locality in feet above sea level. For some localities the elevation is indicated in the "Biologia," but for the most part these data were obtained from other sources (see below). Elevations are not given for coastal localities at or near sea level. Most elevations recorded as approximations (e.g., 5000  $\pm$  feet) were determined by interpreting topographical coloration on the "Map of Hispanic America," the "World aeronautical charts," or other maps consulted, and are accurate only within a range of plus or minus 1000 or more feet. These approximations should be sufficient for gross ecological study of distribution. Furthermore, since material labeled as taken at a given locality by older collectors may have been obtained at any place within a radius of several miles of the locality, the specification of exact elevations of such localities, particularly in mountainous regions, may only lend a false sense of accuracy to the distributional data.

Coordinates of latitude and longitude in degrees and minutes are given as a final element in the definitions of names denoting populated centers and specific, local, physiographic features. These data refer always to north latitude and west longitude. They were obtained for most localities directly from the "Map of Hispanic America" or the "World aeronautical charts" or from the gazetteers of the United States Board on Geographic Names cited above. Since the scale of these maps is 1:1,000,000, and the scale of the map from which the coordinates given by the United States Board on Geographic Names were obtained is 1:500,000, data obtained from these references have a high degree of accuracy. For some localities, coordinates were determined from road maps, the "Biologia" maps, or other maps drawn on a smaller scale, and data obtained in this manner are necessarily approximate. It should be stressed that, in any event, the coordinates given in this gazetteer are for finding purposes only and are not to be interpreted as definitive. It is necessary to add that, in the case of rivers cited in the "Biologia," coordinates were usually determined at the mouth; no consistency in this matter was attempted, however, and in some cases coordinates designate a main section of a river.

ACKNOWLEDGMENTS: We are indebted to Mr. Robert F. Bruce, Foreign Department, Esso Touring Service, for complimentary copies of road maps of México and the Central American republics; to Mr. R. C. Buckley, Assistant Manager, Automobile Club of Southern California, for a copy of the club's "Outing map [of] Lower California"; and to Mr. F. A. Clemens, Chief, Cartography Division, Aeronautical Chart and Information Center, Air Photographic and Charting Service, United States Air Force, for sets of the "World aeronautical charts" covering México and Central America.

We are also indebted to Drs. O. L. Cartwright, F. Gates Clarke, and Alexander Wetmore, United States National Museum, for assistance in the identification of some localities in Panamá of Busck and others who collected for the National Museum; to Mr. E. Eisenmann and Dr. P. Slud, the American Museum of Natural History, for information on some localities in Costa Rica and Panamá; and to Dr. L. C. Stuart, University of Michigan, for references to several helpful works and aid in our treatment of localities in Guatemala.

Valuable assistance in finding some Mexican localities and in various bibliographic details was rendered by Messrs. Bill Woods and Robert C. White, former and present librarians, respectively, of the Map Division, University of Illinois Library. Helpful suggestions regarding format and style were received in the course of our work from Miss Ruth Tyler, Editor, Scientific Publications, the American Museum of Natural History.

Although the preparation of this gazetteer was largely a "spare-time" project, grants awarded to us for other research activities by the National Science Foundation indirectly supported the work, and the assistance of the Foundation is gratefully acknowledged.

## GAZETTEER

ACAGUIZOTLA = Acahuizotla, Guerrero, México. Village 17.5 km. south of Chilpancingo; 3500 feet;  $17^{\circ} 23'$ ,  $99^{\circ} 27'$ .

ACAJUTLA, SONSONATE, EL SALVADOR. Pacific port 19 km. southwest of Sonsonate;  $13^{\circ} 36'$ ,  $89^{\circ} 50'$ .

ACÁMBARO, GUANAJUATO, MÉXICO. City in southeastern Guanajuato; 6065 feet;  $20^{\circ} 02'$ ,  $100^{\circ} 44'$ .

ACAPONETA, NAYARIT, MÉXICO. Town in northwestern Nayarit, near the border of Sinaloa;  $22^{\circ} 30'$ ,  $105^{\circ} 22'$ .

ACAPULCO, GUERRERO, MÉXICO. Pacific port and resort;  $16^{\circ} 51'$ ,  $99^{\circ} 55'$ .

ACATLÁN, PUEBLA, MÉXICO. Town in southern Puebla; 3980 feet;  $18^{\circ} 12'$ ,  $93^{\circ} 03'$ .

ACAXUCHILLAN = San Juanico, México, México. Village (formerly Acaxuchitlan) in the northwestern corner of the state 48 km. southeast of San Juan del Río, Querétaro;  $8500 \pm$  feet;  $20^{\circ} 09'$ ,  $99^{\circ} 36'$ .

ACCEITUNO. See Aceituno.

ACEITUNO, GUATEMALA, GUATEMALA. Coffee plantation just northeast of the city of Guatemala; 5000± feet; 14° 36', 90° 28'.

ACEYTUNO. See Aceituno.

ACOYAPO = Acoyapa, Chontales, Nicaragua. Town on the Río Acoyapa about 13 km. inland from the middle of the eastern shore of Lago de Nicaragua; 11° 57', 85° 12'.

ACTOPAM. See Actopan.

ACTOPAN, MÉXICO. Not identified. The only locality of this name shown on the "Biología" maps is the Otomí town of Actopan, Hidalgo, 27 km. northwest of Pachuca; 6717 feet; 20° 16', 98° 56'. As used in the "Biología" text, however, the name may actually refer to the village of Actopan, Veracruz, on the Río Actopan 32 km. east of Jalapa; 1500 feet; 19° 30', 96° 37'.

ACULSINGO. See Aculzingo.

ACULZINGO = Acultzingo, Veracruz, México. Village in central Veracruz about 27 km. southwest of Orizaba; 7000± feet; 18° 43', 97° 19'.

AGIABAMPO, SONORA, MÉXICO. Coastal village on the Estero de Agiabampo, near the border of Sinaloa; 26° 22', 109° 14'.

AGUA AZUL, GUADALAJARA, JALISCO, MÉXICO. Park (Parque Agua Azul) about 1 km. south of Guadalajara, on the highway to Chapala; 5200 feet; 20° 39', 103° 22'.

AGUA CALIENTE, GUATEMALA, GUATEMALA. Settlement on the highway about 28 km. northwest of the city of Guatemala; 6000± feet; 14° 55', 90° 18'.

AGUASCALIENTES, AGUASCALIENTES, MÉXICO. Capital of the state of Aguascalientes; 6225 feet; 21° 53', 102° 18'.

AGUAS CALIENTES CITY. See Aguascalientes.

AGUIABAMBO, SINALOA, MÉXICO. Not located. There is a settlement of this name in Sonora 16 km. northwest of Navojoa; 27° 12', 109° 31'.

AHUALCO. See Ahualulco.

AHUALULCO = Ahualulco de Mercado, Jalisco, México. Large town 64 km. west of Guadalajara; 4000 feet; 20° 42', 103° 59'.

ALAJUELA, ALAJUELA, COSTA RICA. Capital of Alajuela Province and about 18 km. northwest of San José; 3100 feet; 10° 01', 84° 13'.

ALAJUELA, PANAMÁ. See Alhajuela.

ÁLAMOS, CHIHUAHUA, MÉXICO. Not identified. There are at least three settlements of this name in the state of Chihuahua.

ÁLAMOS, SONORA, MÉXICO. Colonial town in southern Sonora 51 km. east of Navojoa; 1345 feet; 27° 02', 108° 56'.

ALHAJUELA, COLÓN, PANAMÁ. Settlement near Madden Dam about midway on the highway between Panamá and Colón; 9° 13', 79° 38'.

ALMOLONGA, VERACRUZ, MÉXICO. Town in central Veracruz 16 km. northeast of Jalapa; 2500± feet; 19° 36', 96° 47'.

ALMOLOYA, MÉXICO. Not identified. There are villages of this name in Guerrero, Hidalgo, México, and Oaxaca.

ALOTENANGO, SACATEPÉQUEZ, GUATEMALA. Town midway between the volcanoes Agua and Fuego about 12 km. southwest of Antigua; 4514 feet; 14° 27', 90° 48'.

ALTAMIRA, TAMAULIPAS, MÉXICO. Small town near the coast in southern Tamaulipas 17.5 km. north-northwest of Tampico; 22° 24', 97° 55'.

ALTO DEL TIZAR, MÉXICO. Not located.

- ALVARADO, VERACRUZ, MÉXICO. Atlantic port on the Laguna de Alvarado 61 km. southeast of the city of Veracruz;  $18^{\circ} 46'$ ,  $95^{\circ} 46'$ .
- ALVARES MOUNTAINS. See Alvarez Mountains.
- ALVAREZ MOUNTAINS, SAN LUIS POTOSÍ, MÉXICO. A Palmer locality name, probably referring to the low mountains east of the city of San Luis Potosí. In this area there are a railroad station and settlement of Alvarez 35 km. southeast of the city and a village of Alvares 29 km. east of the city. The state is not given in the "Biologia"; Champion (Coleoptera, vol. 4, pt. 2, p. 425) indicates that the locality is in northern México.
- AMATÁN, CHIAPAS, MÉXICO. Village near the border of Tabasco 72 km. north-northeast of Tuxtla Gutiérrez;  $2000 \pm$  feet;  $17^{\circ} 21'$ ,  $92^{\circ} 45'$ .
- AMATITLÁN, GUATEMALA, GUATEMALA. City at the western end of Lago de Amatitlán 15 or 20 km. southwest of the city of Guatemala;  $3800 \pm$  feet;  $14^{\circ} 27'$ ,  $90^{\circ} 38'$ .
- AMATLÁN = Amatlán de Cañas, Nayarit, México. Village at the southern tip of Nayarit 91.5 km. southeast of Tepic; 2560 feet;  $21^{\circ} 23'$ ,  $104^{\circ} 08'$ .
- AMECAMECA, MÉXICO, MÉXICO. Town on the highway between the city of México and Cuautla, Morelos, 48 km. southeast of the city of México; 9629 feet;  $19^{\circ} 06'$ ,  $98^{\circ} 46'$ .
- AMOQUILECA, GUERRERO, MÉXICO. Not located.
- AMULA, GUERRERO, MÉXICO. Village shown on "Biologia" Map 5 about 9.5 km. northwest of Chilapa; 6000 feet; approximately  $17^{\circ} 38'$ ,  $99^{\circ} 15'$ .
- ANCÓN, CANAL ZONE, PANAMÁ. Town near the city of Panamá;  $8^{\circ} 57'$ ,  $79^{\circ} 33'$ .
- ANGANG[UEO], MICHOACÁN, MÉXICO. Railroad station and mining town in the eastern part of the state;  $9000 \pm$  feet;  $19^{\circ} 37'$ ,  $100^{\circ} 17'$ .
- ANTIGUA = Antigua Guatemala, Sacatepéquez, Guatemala. Settlement about 20 km. west of the city of Guatemala;  $5000 \pm$  feet;  $14^{\circ} 34'$ ,  $90^{\circ} 45'$ .
- ARCANGELES, COSTA RICA. Not located. This is a Biolley locality; the elevation is given in the "Biologia" as 1500 to 1700 meters.
- ARCAS ISLETS = Cayos Arcas, Campeche, México. Small group of islets in the Golfo de México (Bahía de Campeche) roughly 160 km. northwest of the city of Campeche;  $20^{\circ} 12'$ ,  $91^{\circ} 58'$ .
- ARIO, MICHOACÁN, MÉXICO. Small town 37 km. south-southwest of Pátzcuaro; 6698 feet;  $19^{\circ} 12'$ ,  $101^{\circ} 43'$ .
- ARROYO DEL MUERTO = Arroyo del Muerto, Jalisco, México. Ravine described by Beebe (1905) as near the border of Colima about 16 km. from the Nevado de Colima; elevation unknown; Nevado de Colima at  $19^{\circ} 33'$ ,  $103^{\circ} 06'$ .
- ARROYO SAN ISIDRO, TABASCO, MÉXICO. Branch of the Río Usumacinta 15 km. south of Frontera;  $18^{\circ} 23'$ ,  $92^{\circ} 36'$ .
- ARROYO ZARCO, MÉXICO. Not identified. There are streams of this name in Hidalgo, Querétaro, and Veracruz.
- ASERRÍ, SAN JOSÉ, COSTA RICA. Town about 11 km. south of San José;  $4000 \pm$  feet;  $9^{\circ} 52'$ ,  $84^{\circ} 05'$ . The "Biologia" name Cangrejal de Aserrí probably refers to a nearby stream.
- ASPINWALL. See Colón.
- ATAYAC. See Atoyac.
- ATENAS, ALAJUELA, COSTA RICA. Small town on the highway 25 km. west and slightly south of Alajuela;  $2300 \pm$  feet;  $9^{\circ} 58'$ ,  $84^{\circ} 23'$ .
- ATENQUIQUE, JALISCO, MÉXICO. Village and railroad station in southern Jalisco

21 km. south of Ciudad Guzmán; 8000± feet; 19° 31', 103° 30'.

ATIRRO, CARTAGO, COSTA RICA. Small village about 8 km. south of Turrialba; 2500± feet; 9° 52', 83° 40'.

ATLAPANGO, MÉXICO, MÉXICO. Village 27 km. south-southeast of Chalco; 8000± feet; 19° 02', 98° 51'.

ATLIHUACAN, PUEBLA, MÉXICO. Not located. This is possibly a reference to Atlahuacan, Morelos, north of Cuautla; 18° 56', 98° 54'.

ATLISCO. See Atlixco.

ATLIXCO, PUEBLA, MÉXICO. City in western Puebla about 30.5 km. southwest of the city of Puebla; 6166 feet; 18° 54', 98° 28'.

ATOTONILCO, HIDALGO, MÉXICO. Small town in eastern Hidalgo 17.5 km. north-northeast of Pachuca; 7000± feet; 20° 17', 98° 40'. The town is also known as Atotonilco el Grande.

ATOYAC, VERACRUZ, MÉXICO. Small town on the railroad between Córdoba and the city of Veracruz about 16 km. east of Córdoba; 1314 feet; 18° 54', 96° 46'.

AZAHAR DE CARTAGO, CARTAGO, COSTA RICA. Settlement said to be "four or five miles from Cartago to the southwest, in the Candelaria Mountains [*q. v.*], and having an altitude of about 5,000 to 7,000 feet" (Carriker, 1910, p. 334).

BAGACES, GUANACASTE, COSTA RICA. Village on the highway near the center of the eastern side of the province just east of the Río de las Piedras; 10° 31', 85° 15'.

BAHÍA DE SALINAS, GUANACASTE, COSTA RICA. Bay on the Pacific coast in the extreme northwest of the province; 11° 03', 85° 43'.

BAIE DE CAMPÊCHE. See Bay of Campeche.

BAJA CALIFORNIA, MÉXICO. Large peninsula now divided politically into the state of Baja California Norte and the territory of Baja California Sur.

BAJA PURÍSIMA = Arroyo Purisima, Baja California Sur, México. Stream in the western central part of the territory arising near La Purisima and joining the Arroyo San Gregorio near the west coast; 29° 09', 112° 15'. The stream is also known as Río Cadegomo.

BALANTAM, YUCATÁN, MÉXICO. Not located. There are two settlements of Balantún in Yucatán. These are 25 km. and 76 km. west-northwest of Valladolid.

BALHEU, ALTA VERAPAZ, GUATEMALA. Hacienda about 16 km. southwest of Cobán; 5000± feet; shown on "Biologia" Map 8 at about 15° 24', 90° 26'.

BALSAS, GUERRERO, MÉXICO. Village on the Río Balsas in northern central Guerrero 45 km. southwest of Iguala; 1500± feet; 17° 59', 99° 47'.

BANANA RIVER = Río Banano, Limón, Costa Rica. Fairly large river emptying into the Caribbean Sea about 6 km. south of Puerto Limón; 9° 56', 83° 00'.

BAÑOS DE SANTA ROSALÍA, CHIHUAHUA, MÉXICO. Calvert (1907) describes this locality as the site of warm sulfur springs 4.8 km. north of Santa Rosalia (now called Ciudad Camargo); 4020 feet; 27° 45', 105° 11'. Ciudad Camargo is a city about 137 km. southeast of the city of Chihuahua.

BARRANCA BLANCA, NAYARIT, MÉXICO. Ravine described in the "Biologia" (Neuroptera, p. 55) as near the city of Tepic (*q. v.*); 2400 feet.

BARRANCA DE BALTRAN, JALISCO OR COLIMA, MÉXICO. Described in the "Biologia" (Coleoptera, vol. 1, pt. 1, p. 260) as "on the road between Guadalajara and Colima."

BAUTISTA. See San Juan Bautista.

BAY OF CAMPECHE = Bahía de Campeche, México. Bay in the Golfo de México

- bordered on the east by the Yucatán peninsula and on the west by the coast of Veracruz; 20° 00', 94° 00'.
- BAY OF HONDURAS = Golfo de Honduras, Honduras. Gulf north of Honduras and east of British Honduras; 16° 10', 87° 50'.
- BAY OF TEHUANTEPEC = Golfo de Tehuantepec, México. Gulf south of the Istmo de Tehuantepec in southern México; 16° 00', 95° 00'.
- BEBEDERO, GUANACASTE, COSTA RICA. Village not much above sea level on the river of the same name about 10 km. southwest of Las Cañas; 10° 22', 85° 12'.
- BELIZE, BELIZE, BRITISH HONDURAS. National capital and port; 17° 30', 88° 12'.
- BELIZE RIVER, CAYO, BRITISH HONDURAS. River rising in El Petén, Guatemala, and flowing into the Caribbean Sea at Belize; 17° 32', 88° 14'.
- BKISTEBU, PUNTARENAS, COSTA RICA. Not located. Calvert (Neuroptera, p. xv) says that the locality is in Puntarenas Province and gives the elevation as 2624 to 3280 feet.
- BLEWFIELDS = Bluefields, Zelaya [formerly Bluefields], Nicaragua. Atlantic port; 12° 00', 83° 45'.
- BOBO, VERACRUZ, MÉXICO. There is a Río Bobo in Veracruz rising 17.5 km. north of Perote and flowing into the Río Nautla near Tlapacoyan, and the name Bobo probably refers either to this river or to a settlement on the river. The mouth of the river is at 20° 00', 97° 10'. (There is a village of Jobo near this point.)
- BOCA CULEBRA = Boca de Culebra or Bahía de Culebra, Guanacaste, Costa Rica. Bay on the northern part of the Pacific coast near the port of Culebra; 10° 37', 85° 40'.
- BOCA DE LIMÓN. See Boca del Limón.
- BOCA DEL LIMÓN, PUNTARENAS, COSTA RICA. According to Calvert (Neuroptera, p. xv), the Río Limón referred to in the "Biología" is the one in Puntarenas Province on the Pacific coast, not the one near Puerto Limón on the Atlantic coast. The former river empties into the Río Diquis, which flows into the Bahía de Coronada; 8° 59', 83° 15'.
- BOCA DEL MONTE, VERACRUZ, MÉXICO. Railroad station on the eastern edge of the Mexican Plateau 24 km. west of Orizaba; 7800± feet; 18° 50', 97° 19'. (See Goldman, 1951, p. 268.)
- BOCA DEL SIMÓN, COSTA RICA. Not located. There is a Simon Lake near the Atlantic coast in Limón Province south of San Juan del Norte.
- BOCA NUEVA, ALTA VERAPAZ, GUATEMALA. Stuart (*in litt.*) describes this locality as a few huts in the valley of the Río Polochic about 5 km. upstream from Panzós (*q. v.*).
- BOCAS DEL TORO, BOCAS DEL TORO, PANAMÁ. Town in the archipelago of the same name on the Isla de Colón off the Atlantic coast; 9° 20', 82° 15'.
- BOLAÑOS, JALISCO, MÉXICO. Village on the Río de Bolaños in the central northern extension of the state 90 km. northeast of Ixtlán del Río, Nayarit; 3118 feet; 21° 41', 103° 47'.
- BONACCA ISLAND = Isla de Guanaja, Islas de la Bahía, Honduras. Small island east of Isla de Roatán off the Atlantic coast; 16° 30', 85° 55'.
- BOQUERÓN, CHIRIQUÍ, PANAMÁ. Village in the western part of the province about 18 km. northwest of David; 8° 31', 82° 35'.
- BOQUETE = Bajo Boquete, Chiriquí, Panamá. Town on the southeastern slope of Volcán de Chiriquí about 30 km. due north of David; 3550 feet; 8° 36', 82° 27'.

**BORUCA, PUNTARENAS, COSTA RICA.** Indian village in southern Costa Rica north of the Río Diquis and about 18 km. southwest of Buenos Aires;  $1500 \pm$  feet;  $9^{\circ} 00'$ ,  $83^{\circ} 20'$ .

**BOSQUE DE PACHO, VERACRUZ, MÉXICO.** Pacho is the name of a mountain and a railroad station about 5 km. south of Jalapa. Bosque de Pacho presumably refers to the forest on this mountain; station at  $6000 \pm$  feet;  $19^{\circ} 28'$ ,  $96^{\circ} 55'$ .

**BRITO, ESCUINTLA, GUATEMALA.** Settlement on the highway near the border of the department of Santa Rosa 25 km. southeast of Escuintla;  $14^{\circ} 07'$ ,  $90^{\circ} 40'$ .

**BUENOS AIRES, PUNTARENAS, COSTA RICA.** Village in the southern part of the republic; 1000 feet;  $9^{\circ} 10'$ ,  $83^{\circ} 20'$ .

**BUENOS AYRES.** See Buenos Aires.

**BUGABA, NICARAGUA.** See Bugaba, Panamá.

**BUGABA, CHIRIQUÍ, PANAMÁ.** Settlement on the Pacific slope about 22 km. northwest of David; 1000 feet;  $8^{\circ} 28'$ ,  $82^{\circ} 38'$ . The locality is sometimes cited erroneously as in Nicaragua.

**BULIACAN = Culiacán, Sinaloa, México.** Capital of the state of Sinaloa;  $24^{\circ} 48'$ ,  $107^{\circ} 24'$ .

**CABIMA, CANAL ZONE, PANAMÁ.** According to Zetek (*in litt.*), a settlement of a few houses submerged by the Canal, "about 12 miles from Colón, along the Panamá Railroad";  $9^{\circ} 13'$ ,  $79^{\circ} 53'$ .

**CACAHUAMILPA.** See Cueva (de) Cacahuamilpa.

**CACAO.** See Trece Aguas.

**CACHE.** See Cachí.

**CACHÍ, CARTAGO, COSTA RICA.** Village about 13 km. southeast of Cartago;  $2000 \pm$  feet;  $9^{\circ} 50'$ ,  $83^{\circ} 48'$ .

**CACHIL, BAJA VERAPAZ, GUATEMALA.** Town on the highway 5 km. north of Salamá;  $15^{\circ} 09'$ ,  $90^{\circ} 16'$ .

**CADEREITA = Cadereyta, Nuevo León, México.** Large town 34 km. east-southeast of Monterrey;  $25^{\circ} 36'$ ,  $100^{\circ} 00'$ .

**CAHABÓN, ALTA VERAPAZ, GUATEMALA.** Town in the mountains in the eastern part of the department about 18 km. north of Senahú; elevation unknown;  $15^{\circ} 36'$ ,  $89^{\circ} 07'$ .

**CAJABÓN.** See Cahabón.

**CALAMUJUE = Calamujué, Baja California Norte, México.** Settlement (also a bay and a mountain) on the eastern slope of the peninsula, south of Bahía San Luis Gonzaga; 950 feet;  $29^{\circ} 38'$ ,  $114^{\circ} 25'$ . The locality appears on the "World aeronautical charts" as Milino Paraje de Calamaue, at  $29^{\circ} 38'$ ,  $114^{\circ} 23'$ ; it is also known as Calamahué.

**CALDERA ISLAND, PORTOBELLO BAY, COLÓN, PANAMÁ.** Island not located, but Portobello is found on the Atlantic coast about 30 km. northeast of the city of Colón at  $9^{\circ} 33'$ ,  $79^{\circ} 39'$ .

**CALDERAS, CHIMALTENANGO, GUATEMALA.** Village on the slope of Volcán de Fuego 10 km. west of Antigua; 7000 feet;  $14^{\circ} 28'$ ,  $90^{\circ} 57'$ .

**CALOBRE, VERAGUAS, PANAMÁ.** Village and health resort at about the center of the eastern part of the province 25 km. northeast of Santiago;  $8^{\circ} 16'$ ,  $80^{\circ} 49'$ .

**CALPULPAM = Calpulalpan, México.** Not identified. The locality in question is probably the village of Calpulalpan in Oaxaca, 40 km. northeast of the city of Oaxaca;  $4000 \pm$  feet;  $17^{\circ} 18'$ ,  $96^{\circ} 26'$ .

**CAMARÓN, VERACRUZ, MÉXICO.** Railroad station on the line between Córdoba

- and the city of Veracruz 37 km. northeast of Córdoba; 1342 feet; 19° 02', 96° 36'.
- CAMINO DE LA PALMA, SAN JOSÉ, COSTA RICA. Road between Guadalupe, at 9° 57', 84° 03', and El Alto, at 9° 53', 83° 57', in the vicinity of San José; 4000± feet.
- CAMPALA, DURANGO OR SINALOA, MÉXICO. Not located. This is a Forrer locality; the state is variously given as Durango or Sinaloa in the "Biología."
- CAMPEACHE. See Campeche.
- CAMPEACHY. See Campeche.
- CAMPECHE, CAMPECHE, MÉXICO. Capital of the state of Campeche, on the coast; 19° 51', 90° 32'.
- CAÑA MINES = Cana [*sic*] or Santa Cruz de Cana, Darién, Panamá. Village and gold mines in the mountains of the southeastern part of the province; 2000 feet; 7° 44', 77° 40'.
- CAÑAS GORDAS = Hacienda Cañas Gordas, Puntarenas, Costa Rica. Hacienda in the southern mountains on the border of Panamá; 3800± feet; 8° 48', 83° 03'.
- CANDELARIA MOUNTAINS, SAN JOSÉ, COSTA RICA. Mountain range south of the valley of San José, rising to 7000 feet; 9° 50', 84° 25'.
- CANELAS, DURANGO, MÉXICO. Village in western Durango 229 km. northwest of the city of Durango and 90 km. east-northeast of Culiacán, Sinaloa; 6000± feet; 25° 06', 106° 34'.
- CANGREJAL DE ASERRÍ. See Aserrí.
- CAPE SAN LUCAS = Cabo San Lucas, Baja California Sur, México. Cape at the southern end of the peninsula of Baja California; 22° 52', 109° 33'.
- CAPE ST. LUCAS. See Cape San Lucas.
- CAPETILLO, SACATEPÉQUEZ, GUATEMALA. Estate near Dueñas about 5 km. southwest of Antigua; shown on "Biología" Map 8 at approximately 14° 29', 90° 48'.
- CAPULALPAM. See Calpulalpam.
- CARIBLANCO, HEREDIA, COSTA RICA. Settlement on the Río Sarapiquí 10 km. northeast of Volcán de Poás; 1500± feet; 10° 16', 84° 10'.
- CARRILLO, SAN JOSÉ, COSTA RICA. Settlement on the Río Sucio in the extreme northeastern corner of the province; 1500± feet; 10° 09', 83° 55'.
- CARRIZAL, GUATEMALA, GUATEMALA. Village about 18 km. northwest of the city of Guatemala; 14° 45', 90° 32'. It is also known as El Carrizal.
- CARTAGO, CARTAGO, COSTA RICA. Second largest city of Costa Rica; 4500 feet; 9° 52', 83° 55'.
- CASAS GRANDES, CHIHUAHUA, MÉXICO. Town in northwestern Chihuahua 8 km. west of Nuevo Casas Grandes, which is on the railroad line; 4850 feet; 30° 22', 107° 57'.
- CASTILLO = El Castillo, Río San Juan [formerly Chontales], Nicaragua. Southeastern town on the Río San Juan just north of the border of Costa Rica; 11° 01', 84° 25'.
- CATEMACO, VERACRUZ, MÉXICO. Village on the western shore of Lago de Catemaco 11 km. southeast of San Andrés Tuxtla; 1000± feet; 18° 25', 95° 07'.
- CAYO, CAYO, BRITISH HONDURAS. Town and archeological site southwest of Belize and very close to the boundary of El Petén, Guatemala; 17° 10', 89° 04'.
- CERRITOS, SAN LUIS POTOSÍ, MÉXICO. Not located.
- CERRO CARISLA = Cerro Cuericí or Cerro Páramo, Cartago, Costa Rica. Prob-



- ably the mountain (cerro) on the border of Cartago and San José about 45 km. southeast of Cartago;  $9^{\circ} 32'$ ,  $83^{\circ} 43'$ .
- CERRO DEL GALLEGO = El Gallego, Chihuahua, México. Mountain near the village of Gallego on the railroad line 137 km. north of the city of Chihuahua;  $6000 \pm$  feet;  $29^{\circ} 49'$ ,  $106^{\circ} 19'$ .
- CERRO DE PLUMAS = Cerro de Palmas, Veracruz, México. Not located. In later parts of the "Biología" text (e.g., Coleoptera, vol. 4, pt. 5, p. 419; vol. 4, pt. 7, p. 101), "Cerro de Palmas" is introduced as a correction for "Cerro de Plumas." Champion (1914, p. 167) gives the state as Veracruz.
- CERRO GORDO, MÉXICO. Not identified.
- CERROS I[SLAND] = Isla Cedros, Baja California Norte, México. Large island off the west coast of the peninsula of Baja California and forming the western limit of the Bahía Sebastián Vizcaino; highest point at 3950 feet;  $28^{\circ} 12'$ ,  $115^{\circ} 15'$ .
- CERRO ZUMIL. See Cerro Zunil.
- CERRO ZUNIL = Volcán Zunil, Quezaltenango, Guatemala. Volcanic mountain on the Pacific slope about 12 km. southeast of Quezaltenango;  $14^{\circ} 43'$ ,  $91^{\circ} 29'$ .
- CHABAO, MÉXICO. Not located.
- CHACAJ, ALTA VERAPAZ, GUATEMALA. Settlement (formerly called La Hamaca) on the Río Polochic just west of La Tinta; shown on "Biología" Map 8 at about  $15^{\circ} 19'$ ,  $89^{\circ} 56'$ .
- CHALCHICOMULA. See San Andrés Chalchicomula.
- CHALCO, MÉXICO, MÉXICO. Small city in the southeastern part of the state of México about 20 km. northwest of Amecameca; 7488 feet;  $19^{\circ} 16'$ ,  $98^{\circ} 54'$ .
- CHAMIQÚIN, ALTA VERAPAZ, GUATEMALA. Small settlement on the Río Polochic just west of La Tinta; shown on "Biología" Map 8 at approximately  $15^{\circ} 19'$ ,  $89^{\circ} 58'$ .
- CHAMPERICO, RETALHULEU, GUATEMALA. Pacific port 40 km. southeast of the Mexican border;  $14^{\circ} 18'$ ,  $91^{\circ} 04'$ .
- CHAPALA, JALISCO, MÉXICO. Large town on the northern shore of Lago de Chapala about 45 km. south-southeast of Guadalajara; 5100 feet;  $20^{\circ} 18'$ ,  $103^{\circ} 12'$ .
- CHAPANTONGO, HIDALGO, MÉXICO. Village in southwestern Hidalgo 48 km. west of Actopan;  $7000 \pm$  feet;  $20^{\circ} 17'$ ,  $99^{\circ} 24'$ .
- CHAPULCO, PUEBLA, MÉXICO. Not identified. There are two settlements named Chapulco in México, both in the state of Puebla. The better known of these, and probably the one referred to in the "Biología," is 17.5 km. north of Tehuacán;  $6000 \pm$  feet;  $18^{\circ} 37'$ ,  $97^{\circ} 24'$ . The other (not shown on any of the maps consulted) is 6 km. south of the city of Puebla;  $6000 \pm$  feet;  $18^{\circ} 58'$ ,  $98^{\circ} 11'$ .
- CHAPULTEPEC, DISTRITO FEDERAL, MÉXICO. Unless the state of Michoacán is specified in the "Biología," this name refers to the famous park of Chapultepec in the southwestern part of the city of México (*q. v.*).
- CHAPULTEPEC, MICHOACÁN, MÉXICO. Village 14 km. east of Pátzcuaro;  $8000 \pm$  feet;  $19^{\circ} 32'$ ,  $101^{\circ} 28'$ .
- CHAPULTEPEC. See Chapultepec, Distrito Federal.
- CHAVARRILLO. See Chavarrillo.
- CHAVARRILLO, VERACRUZ, MÉXICO. Railroad station on the line to the city of Veracruz 17.5 km. south of Jalapa; 3100 feet;  $19^{\circ} 25'$ ,  $96^{\circ} 48'$ .
- CHEPO, PANAMÁ, PANAMÁ. Village on the highway about 54 km. northeast of

the city of Panamá; 9° 11', 79° 06'.

CHIACAM, ALTA VERAPAZ, GUATEMALA. Former coffee plantation in the mountains about 26 km. northeast of Cobán; 2400 feet; shown on "Biologia" Map 8 at approximately 15° 34', 90° 06'.

CHIACAMAN. See Chiacam.

CHIACOJ. See Chacoj.

CHIAPAS, MÉXICO. Southernmost state of México.

CHICHÊN ITZÁ, YUCATÁN, MÉXICO. Site of Mayan ruins (now an archeological zone) about 121 km. east of Mérida; 20° 40', 88° 34'.

CHIHUAHUA, CHIHUAHUA, MÉXICO. Capital and largest city of the state of Chihuahua; 4593 feet; 28° 38', 106° 05'.

CHIHUAHUA CITY. See Chihuahua.

CHILASCÓ, BAJA VERAPAZ, GUATEMALA. Village in the mountains about 20 km. east of Salamá; 15° 07', 90° 04'.

CHILPANCINGO, GUERRERO, MÉXICO. Capital of the state of Guerrero; 3800 feet; 17° 33', 99° 30'.

CHIMALTENANGO, CHIMALTENANGO, GUATEMALA. Head of the department about 32 km. northwest of the city of Guatemala; 5650 feet; 14° 38', 90° 51'.

CHINANDEGA, CHINANDEGA, NICARAGUA. City about 15 km. from the Pacific Ocean and 30 km. northwest of León; 12° 37', 87° 09'.

CHINANTLA, PUEBLA, MÉXICO. Village on or near the Río Acatlán in southern Puebla 96.5 km. southwest of Tehuacán and about 109 km. south of the city of Puebla; 4000± feet; 18° 12', 98° 15'.

CHINAUTLA, GUATEMALA, GUATEMALA. Town on the highway about 10 km. north of the city of Guatemala; 4000± feet; 14° 42', 90° 29'.

CHINAUTLA, MÉXICO. See Chinantla.

CHIQUEHUITE, MÉXICO. Not identified. There are settlements of this name in several states.

CHIQUESHUITA, MÉXICO. Not located.

CHIRIQUÍ, CHIRIQUÍ, PANAMÁ. Village on the highway, Pacific slope, about 12 km. east of David; 8° 23', 82° 20'.

CHIRIQUICITO, BOCAS DEL TORO, PANAMÁ. Village and United Fruit Company plantation on the Laguna de Chiriquí, the Atlantic slope of western Panamá, about 6 km. inland from Chiriquí Grande; approximately 8° 57', 82° 07'.

CHIRRIPO, LIMÓN, COSTA RICA. Settlement on the river of the same name about 43 km. southwest of Puerto Limón, Atlantic slope; 4000± feet; 9° 49', 83° 25'.

CHISOY VALLEY. See Río Chixoy.

CHITRA, VERAGUAS, PANAMÁ. Village on the Atlantic slope close to the border of the province of Cocle; 8° 32', 80° 38'.

CHIXOY. See Río Chixoy.

CHOCTUM. See Choctun.

CHOCTUN, ALTA VERAPAZ, GUATEMALA. Small settlement 18 to 20 km. north of Cobán and near Cubilguitz; 1500± feet; shown on "Biologia" Map 8 at about 15° 40', 90° 25'.

CHOLULA, PUEBLA, MÉXICO. Small city 9.5 km. west of the city of Puebla; 7052 feet; 19° 04', 98° 18'.

CHONTALES, NICARAGUA. Department to the east of Lago de Nicaragua. It formerly extended farther southward to what is now the department of Río San Juan.

- CHORCHA, CHIRIQUÍ, PANAMÁ. Settlement on the highway 18 km. east of David; 8° 21', 82° 18'.
- CHUACÚS, BAJA VERAPAZ, GUATEMALA. Settlement on the border of the modern department of El Progreso about 20 km. southwest of Salamá; 14° 55', 90° 18'.
- CHUPAROSA, BAJA CALIFORNIA SUR, MÉXICO. Camp about 21 km. northwest of Miraflores; 5000 feet; shown at approximately 23° 32', 109° 52' on the map of Michelbacher and Ross (1942, pl. 3). The camp is described (as La Chuparosa) by Goldman (1951, p. 57).
- CINCO SEÑORES, PUEBLA, MÉXICO. Settlement 4 to 8 km. northwest of Tehuacán; 4000± feet; 18° 30', 97° 24'.
- CIUDAD, DURANGO, MÉXICO. This Forrer locality, cited in the "Biología" as "Ciudad in Durango" or "Ciudad, province of Durango," is presumably the settlement of Ciudad or La Ciudad near the border of Sinaloa 148 km. west-northwest of the city of Durango; 8100 feet; 24° 23', 106° 03'.
- CIUDAD DEL MAÍZ, SAN LUIS POTOSÍ, MÉXICO. Town in the eastern part of the state about 75 km. northwest of Valles; 4000± feet; 22° 24', 99° 36'.
- CIUDAD JUÁREZ, CHIHUAHUA, MÉXICO. City on the international border south of El Paso, Texas; 3716 feet; 31° 44', 106° 29'.
- CIUDAD MÉXICO. See México.
- CIUDAD PORFIRIO DÍAZ, MÉXICO. Not identified. This name is ambiguous, because there are settlements called Porfirio Díaz in the states of Campeche, Guanaajuato, and Puebla.
- CIUDAD VICTORIA, TAMAULIPAS, MÉXICO. Capital of the state of Tamaulipas; 1059 feet; 23° 44', 99° 08'.
- COAHUILA, MÉXICO. State in northeastern México.
- COAPAN, MÉXICO. Not identified. There is a town of this name in southwestern Puebla about 3 km. southwest of Tehuacán (5500± feet; 18° 26', 97° 24') and another in central Veracruz about 13 km. north of Jalapa (4000± feet; 19° 39', 96° 53'). The former locality is the better known of the two.
- COATEPEC, GUATEMALA. See Coatepeque.
- COATEPEC, VERACRUZ, MÉXICO. Town on the railroad in central Veracruz southwest of Jalapa; 4132 feet; 19° 27', 96° 58'.
- COATEPEQUE, QUEZALTENANGO, GUATEMALA. Town on the coastal plain and highway in the western part of the department about 25 km. northwest of Retalhuleu; 1300± feet; 14° 42', 91° 52'.
- COATZACOALCOS, VERACRUZ, MÉXICO. Atlantic port on the Istmo de Tehuantepec in southern Veracruz; 18° 09', 94° 25'. The port is also known as Puerto México.
- COBÁN, ALTA VERAPAZ, GUATEMALA. Capital of the department, situated in the southwest corner of the department; 4330 feet; 15° 29', 90° 19'.
- COCKSCOMB MOUNTAINS, STANN CREEK, BRITISH HONDURAS. Mountain range west of the Maya Mountains about 45 km. southwest of the port of Stann Creek; 16° 48', 88° 37'.
- COCULA. See Río Cocula.
- COFRE DE PEROTE = Nauhcampatêpetl, Veracruz, México. Volcanic mountain 25 km. west of Jalapa; summit at 14,048 feet; 19° 29', 97° 08'.
- COHABÓN. See Cahabón.
- COLIMA, MÉXICO. This name may refer either to the state of Colima or to the capital of the state; 1597 feet; 19° 14', 103° 43'. In most cases the meaning is

evident from the context; Colima City is sometimes given.

COLIMA CITY. See Colima.

COLÓN, COLÓN, PANAMÁ. Port on the Caribbean coast opposite the city of Panamá;  $9^{\circ} 22'$ ,  $79^{\circ} 54'$ .

COLONIA, MÉXICO. Not located.

COLONIA GARCÍA, SIERRA MADRE, CHIHUAHUA, MÉXICO. Not identified. There are three settlements called García in the Sierra Madre Occidental in Chihuahua.

COLORADO, VERACRUZ, MÉXICO. There is a village of this name about 70 km. north of the city of Veracruz, at  $19^{\circ} 45'$ ,  $96^{\circ} 31'$ . This is perhaps not the correct locality, however, as the locality is described in the "Biologia" (Hymenoptera, vol. 3, p. 19) as "près de Veracruz."

COMACHO = Camacho, Zacatecas, México. Village on the railroad in northern Zacatecas; 5458 feet;  $24^{\circ} 25'$ ,  $104^{\circ} 18'$ .

COMANCHO. See Comacho.

COMITÁN, CHIAPAS, MÉXICO. Large town in southeastern Chiapas; 5700 feet;  $16^{\circ} 15'$ ,  $92^{\circ} 08'$ .

COMONDÚ, BAJA CALIFORNIA SUR, MÉXICO. Town in central Baja California Sur about 48 km. west of Loreto, which faces Isla Carmen in the Gulf of California; 1472 feet;  $26^{\circ} 03'$ ,  $111^{\circ} 46'$ .

COMPOSTELA, NAYARIT, MÉXICO. Small city 32 km. south of Tepic; 3369 feet;  $21^{\circ} 14'$ ,  $104^{\circ} 55'$ .

CONTRERAS, DISTRITO FEDERAL, MÉXICO. Small city south of the city of México and west of Tlalpan;  $8000 \pm$  feet;  $19^{\circ} 18'$ ,  $99^{\circ} 17'$ .

COPÁN, GUATEMALA. See Copán, Honduras.

COPÁN, COPÁN, HONDURAS. Settlement and Mayan ruins near the border of Guatemala and at one time claimed by that country;  $14^{\circ} 50'$ ,  $89^{\circ} 09'$ .

CORAFALCE, MÉXICO. Not located.

CORCUERA = Corcoera, Chinandega and León, Nicaragua. Settlement near the Pacific Ocean on the border between the two northwestern departments and 10 km. west of the town of León;  $12^{\circ} 28'$ ,  $86^{\circ} 59'$ .

CORDILLERA DE ANÁHUAC, VERACRUZ, MÉXICO. Not located.

CORDILLERAS, GUATEMALA. Probably refers to "Los Altos" or the central plateau of Guatemala.

CÓRDOVA = Córdoba, Veracruz, México. Large city in western central Veracruz; 2624 feet;  $18^{\circ} 35'$ ,  $96^{\circ} 56'$ .

CORINTO, CHINANDEGA, NICARAGUA. Port on the Pacific about 18 km. southwest of Chinandega;  $12^{\circ} 29'$ ,  $87^{\circ} 12'$ .

CORNUVACCA. See Cuernavaca.

COROICO. Not located. The country is not indicated in the "Biologia."

CORONEL, SAN JOSÉ, COSTA RICA. According to Carriker (1910, p. 339), a point in the gorge of the Río Sucio about 6 km. above Carrillo in the northern part of San José Province; elevation unknown; approximately  $10^{\circ} 14'$ ,  $83^{\circ} 52'$ .

COROSAL = Corozal, Corozal, British Honduras. One of the northernmost settlements in the country, on the Bahía de Chetumal 20 km. southwest of Chetumal in Quintana Roo, México;  $18^{\circ} 24'$ ,  $88^{\circ} 24'$ .

COROZAL, CANAL ZONE, PANAMÁ. Village on the railroad about 5 km. north of the city of Panamá;  $8^{\circ} 58'$ ,  $79^{\circ} 34'$ .

CORRAL DE PIEDRAS, PENINSULA OF BAJA CALIFORNIA, MÉXICO. Not located.

CORRIZAL = Corozal, Puntarenas, Costa Rica. Village on the shore of the peninsula of Nicoya within the Golfo de Nicoya and near the border of Guanacaste Province;  $9^{\circ} 59'$ ,  $85^{\circ} 09'$ .

CORROSAL. See Corosal.

COSAMALOAPAM. See Cosamaloapan.

COSAMALOAPAN, VERACRUZ, MÉXICO. Large town on the Río Papaloapan in southern Veracruz;  $18^{\circ} 22'$ ,  $95^{\circ} 48'$ .

COSAMOAPAM. See Cosamaloapan.

COSCOMATEPEC, VERACRUZ, MÉXICO. Large town on the road between Fortín and Huatusco about 26 km. north-northeast of Orizaba; 5214 feet;  $19^{\circ} 04'$ ,  $97^{\circ} 02'$ .

COSTA CUCA, QUEZALTENANGO, GUATEMALA. Name of a district on the Pacific coastal plain west of Retalhuleu; also a small settlement just south of Coatepeque, at  $14^{\circ} 40'$ ,  $91^{\circ} 50'$ .

COTIJA, MICHOACÁN, MÉXICO. Large town near the border of Jalisco about 50 km. west-southwest of Zamora, Michoacán; 5016 feet;  $19^{\circ} 49'$ ,  $102^{\circ} 43'$ .

CRUZ BLANCA, VERACRUZ, MÉXICO. Railroad station on the eastern edge of the Mexican Plateau between Perote and Las Vigas, about 29 km. northwest of Jalapa;  $7000 \pm$  feet;  $19^{\circ} 38'$ ,  $97^{\circ} 10'$ .

CUANTITLÁN. See Cuautitlán.

CUANTLA. See Cuautla.

CUAUTITLÁN, MÉXICO, MÉXICO. Small town about 21 km. north of the northern limits of the city of México and 17.5 km. southwest of Zumpango, México; 7432 feet;  $19^{\circ} 40'$ ,  $99^{\circ} 11'$ .

CUAUTLA, MORELOS, MÉXICO. City 32 km. southeast of Cuernavaca; 4280 feet;  $18^{\circ} 48'$ ,  $98^{\circ} 57'$ .

CUAZIMALPA = Cuajimalpa, Distrito Federal, México. Small town on the highway to Toluca, México, about 9 km. west of the western limits of the city of México; 9800 feet;  $19^{\circ} 21'$ ,  $99^{\circ} 18'$ .

CUBILGUITZ = Gubilguitz, Alta Verapaz, Guatemala. Settlement in the eastern central part of the department 18 km. north of Cobán;  $1050 \pm$  feet;  $15^{\circ} 38'$ ,  $90^{\circ} 22'$ .

CUBILWITZ. See Cubilguitz.

CUBULCO, BAJA VERAPAZ, GUATEMALA. Town 15 km. west of Rabinal, which is west of Salamá; 2900 feet;  $15^{\circ} 08'$ ,  $90^{\circ} 35'$ .

CUERICÍ. See Cerro Carisia.

CUERNAVACA, MORELOS, MÉXICO. Capital of the state of Morelos; 7412 feet;  $18^{\circ} 55'$ ,  $99^{\circ} 15'$ .

CUESTA DE MISANTLA. See Misantla.

CUEVA (DE) CACAHUAMILPA = Grutas de Cacahuamilpa, Guerrero, México. Large cave or cueva (composed of several connected caverns or grutas) near the point where the border of the states of México and Morelos meets the northern border of Guerrero. The settlement of Cacahuamilpa is located nearby;  $4000 \pm$  feet;  $18^{\circ} 40'$ ,  $99^{\circ} 30'$ .

CUITCATLÁN, OAXACA, MÉXICO. Town on the Río Grande and railroad in northern Oaxaca;  $2500 \pm$  feet;  $17^{\circ} 48'$ ,  $96^{\circ} 58'$ .

CUMBRE DEL PELADO, MÉXICO. Not identified. There are two mountains called Cerro Pelado. One is near Pachuca, Hidalgo ( $20^{\circ} 05'$ ,  $98^{\circ} 33'$ ); the other is in the Distrito Federal south of the city of México ( $19^{\circ} 09'$ ,  $99^{\circ} 13'$ ).

DARIÉN, CANAL ZONE, PANAMÁ. Village on the railroad about midway across the isthmus between Panamá and Colón and 7 km. west of Gamboa;  $9^{\circ} 08'$ ,  $79^{\circ} 46'$ .

DAVID, CHIRIQUÍ, PANAMÁ. Principal city of the western part of the province, in the lowlands about 10 km. from the Pacific Ocean;  $8^{\circ} 26'$ ,  $82^{\circ} 26'$ .

DESCONSUELO, TOTONICAPÁN, GUATEMALA. Group of houses in the mountains about 10 km. east of Totonicapán and between that place and Los Encuentros; 10,500 feet; shown on "Biología" Map 8 at approximately  $14^{\circ} 54'$ ,  $91^{\circ} 14'$ .

DIENTE = El Diente, Nuevo León, MÉXICO. Large, tooth-shaped, rock outcrop about 6 km. southwest of Monterrey; 1700 feet;  $25^{\circ} 38'$ ,  $100^{\circ} 21'$ .

DÍQUIS VALLEY, PUNTARENAS, COSTA RICA. Valley of the large Río Diquis (also called Río Grande de Térraba) in southern Costa Rica which empties into the Pacific Ocean in the Bahía de Coronado; approximately  $9^{\circ} 00'$ ,  $83^{\circ} 25'$ .

DISTRITO FEDERAL, MÉXICO. Federal district in which the city of México is located.

DIVALÁ, CHIRIQUÍ, PANAMÁ. Village on the Pacific slope in the extreme west of the province about 15 km. west of David;  $8^{\circ} 25'$ ,  $82^{\circ} 44'$ .

DOLEGA, CHIRIQUÍ, PANAMÁ. Village on the Pacific slope about 18 km. north of David and south of Boquete;  $8^{\circ} 33'$ ,  $82^{\circ} 26'$ .

DOS ARROYOS, GUERRERO, MÉXICO. Settlement near the Río Papagayo 33 km. northeast of Acapulco; 1000 feet;  $17^{\circ} 02'$ ,  $99^{\circ} 40'$ .

DOS CAMINOS, GUERRERO, MÉXICO. Village 37 km. south of Chilpancingo; 2000± feet;  $17^{\circ} 13'$ ,  $99^{\circ} 32'$ .

DUBLAN, HIDALGO, MÉXICO. Not located.

DUEÑAS, SACATEPÉQUEZ, GUATEMALA. Village near the volcano of Acatenango 6 to 8 km. southwest of Antigua; 4700± feet;  $14^{\circ} 32'$ ,  $90^{\circ} 47'$ .

DURANGO, MÉXICO. State in northern México.

DURANGO CITY = Durango, Durango, México. Capital of the state of Durango; 6352 feet;  $24^{\circ} 02'$ ,  $104^{\circ} 40'$ . The official name is Victoria de Durango.

DURASNAL, MÉXICO. Not located. There is some evidence that the locality is in the state of Oaxaca (Sclater, 1858).

DURASNIL. See Durasnal.

EASTERN CORDILLERA. See Sierra Madre Oriental.

EL CAMARÓN. See Camarón.

EL CASTILLO, JALISCO, MÉXICO. This is either a railroad station southeast of Guadalajara ( $20^{\circ} 30'$ ,  $103^{\circ} 14'$ ) or a town on a railroad spur east of that city ( $20^{\circ} 33'$ ,  $102^{\circ} 35'$ ); 5000± feet.

EL CHICO, VERACRUZ, MÉXICO. Settlement 11 km. southeast of Jalapa; 3500± feet;  $19^{\circ} 28'$ ,  $96^{\circ} 49'$ .

EL CHINCHE = Cerro La Chinche, Baja California Sur, México. Mountain about 11 km. north of San Lucas; summit at 1100 feet;  $23^{\circ} 01'$ ,  $109^{\circ} 58'$ .

EL CORA, NAYARIT, MÉXICO. Village 24 km. southwest of Tepic; 1700± feet;  $21^{\circ} 25'$ ,  $105^{\circ} 07'$ .

EL CORONAL OR EL CORONEL. See Coronel.

EL CUYO DE CHICOSAPOTE, TABASCO, MÉXICO. Not located. The locality is described in the "Biología" as near Frontera (*q. v.*). The last part of the name is also given as Chico Sapote.

EL FARO, TABASCO, MÉXICO. Lighthouse at the mouth of the Río Grijalva 10 km. north of Frontera;  $18^{\circ} 36'$ ,  $92^{\circ} 40'$ .

- EL GENERAL = General Viejo, San José, Costa Rica. Village on the highway south of Chirripó in the extreme southern part of the province;  $2500 \pm$  feet;  $9^{\circ} 21'$ ,  $83^{\circ} 39'$ .
- EL IDOLO = San José El Idolo, Suchitepéquez, Guatemala. Settlement on the highway 15 km. southeast of Mazatenango, Pacific slope;  $14^{\circ} 26'$ ,  $91^{\circ} 25'$ .
- EL JÍCARO, EL PROGRESO [formerly Baja Verapaz], GUATEMALA. There are two towns of this name in the department of El Progreso. The one meant in the "Biología" is probably the one shown on "Biología" Map 8 on the slopes of the Chuacús Mountains 15 km. southeast of Salamá; elevation unknown; approximately  $15^{\circ} 01'$ ,  $90^{\circ} 11'$ . The other El Jícaro is at the eastern edge of the department.
- EL MIRADOR. See Mirador.
- EL PARAÍSO, BAJA CALIFORNIA NORTE, MÉXICO. Village in the southern part of the state about 32 km. directly south of Bahía de los Angeles;  $3000 \pm$  feet;  $28^{\circ} 35'$ ,  $113^{\circ} 31'$ .
- EL PUENTE, HIDALGO, MÉXICO. Locality described by Dugès (1869–1881) as near Pachuca (*q. v.*).
- EL RANCHO, EL PROGRESO [formerly Jalapa], GUATEMALA. Village on the railroad 10 km. northeast of El Progreso, Atlantic slope; 900 feet;  $14^{\circ} 52'$ ,  $90^{\circ} 00'$ .
- EL REPOSO, QUEZALTENANGO, GUATEMALA. Settlement on the Pacific slope 17 km. west of Retalhuleu;  $14^{\circ} 33'$ ,  $91^{\circ} 47'$ .
- EL RINCÓN, SAN MARCOS, GUATEMALA. Settlement 3 or 4 km. west of the city of San Marcos;  $14^{\circ} 56'$ ,  $91^{\circ} 50'$ .
- EL ROSARIO, BAJA CALIFORNIA NORTE, MÉXICO. Settlement near the Pacific coast in the center of the state 58 km. west-northwest of Misión San Fernando;  $30^{\circ} 02'$ ,  $115^{\circ} 46'$ .
- EL TABLAZO = Cerro Tablazo, San José, Costa Rica. Mountain in the Cordillera de Talamanca southeast of San José;  $4050 \pm$  feet;  $9^{\circ} 50'$ ,  $84^{\circ} 02'$ .
- EL TUMBADOR, SAN MARCOS, GUATEMALA. Town on the highway about 19 km. northwest of Coatepeque, Pacific slope; 2500 feet;  $14^{\circ} 50'$ ,  $91^{\circ} 52'$ .
- EL ZAPOTE, ESCUINTLA, GUATEMALA. Settlement about 12 km. northwest of Escuintla and south of Volcán de Fuego;  $2000 \pm$  feet;  $14^{\circ} 23'$ ,  $90^{\circ} 52'$ . The settlement was formerly considered to be in the department of Sacatepéquez.
- EL ZUMBADOR. See El Tumbador.
- EMPERADOR STATION. See Empire Station.
- EMPIRE STATION, CANAL ZONE, PANAMÁ. Station on the trans-isthmian railroad 8 km. south of Gamboa;  $9^{\circ} 04'$ ,  $79^{\circ} 40'$ .
- ESCALÓN, CHIHUAHUA, MÉXICO. Railroad station in extreme southeastern Chihuahua 73 km. southeast of Jiménez; 4181 feet;  $26^{\circ} 45'$ ,  $104^{\circ} 20'$ .
- ESCAZÚ, SAN JOSÉ, COSTA RICA. Town on the central plateau about 7 km. west of San José; 3936 feet;  $9^{\circ} 55'$ ,  $84^{\circ} 08'$ .
- ESCONDIDO RIVER. See Río Escondido.
- ESCUINAPA, SINALOA, MÉXICO. Large town in southern Sinaloa; 562 feet;  $22^{\circ} 51'$ ,  $105^{\circ} 48'$ .
- ESCUINTLA, ESCUINTLA, GUATEMALA. Capital of the department, on the Pacific slope about 30 km. south of Antigua;  $1100 \pm$  feet;  $14^{\circ} 17'$ ,  $90^{\circ} 47'$ .
- ESLAVA, DISTRITO FEDERAL, MÉXICO. Not located. The Distrito Federal and an elevation of 8000 feet are specified in the "Biología."
- ESPARTA, PUNTARENAS, COSTA RICA. City on the highway near the Golfo de

- Nicoya about 20 km. east of Puntarenas; 700± feet; 9° 59', 84° 40'.
- ESPERANZA, PUEBLA, MÉXICO. Small town on the railroad line about 29 km. west of Orizaba, Veracruz; 8000± feet; 18° 52', 97° 24'.
- ESTRELLA DE CARTAGO = Estrella, Cartago, Costa Rica. Village in the Cordillera de Talamanca south of Cartago; 6000± feet; 9° 48', 83° 54'.
- ETLA, OAXACA, MÉXICO. Village 17.5 km. northwest of the city of Oaxaca; 6000± feet; 17° 12', 96° 48'.
- EUREKA, BOCAS DEL TORO, PANAMÁ. Settlement on the Atlantic coast on the southern shore of the Laguna de Chiriqui in western Panamá; 9° 57', 82° 07'.
- FLAMENCO ISLAND, PANAMÁ, PANAMÁ. Tiny island at the end of the breakwater close to the city of Panamá; 8° 56', 79° 33'.
- "FLOHR." The last name of the collector Julius Flohr is mistakenly given as a locality in Coleoptera (vol. 1, pt. 2) of the "Biologia."
- FORT SAN CARLOS. See San Carlos, Nicaragua.
- FORTÍN, VERACRUZ, MÉXICO. Small resort town in western central Veracruz between Orizaba and Córdoba; 4000± feet; 18° 54', 97° 00'. Its official name is Fortín de las Flores.
- FRONTERA, TABASCO, MÉXICO. Large town near the mouth of the Río Grijalva in eastern Tabasco about 66 km. north-northeast of Villahermosa; 18° 32', 92° 38'. The town is also known as Álvaro Obregón.
- FUENTE, COAHUILA, MÉXICO. This locality is described in the "Biologia" (Neuroptera, p. vii) as near Saltillo (*q. v.*). No other information concerning it has been found.
- FUERTE DE SAN FELIPE. See Puerto de San Felipe.
- GAMBOA, OAXACA, MÉXICO. Railroad station on the Istmo de Tehuantepec 14 km. north-northwest of Juchitán; 16° 34', 95° 05'.
- GARDIDUEÑA, GUERRERO, MÉXICO. Not located.
- GODINES = Godinez, Sololá, Guatemala. Town on the highway on the northeast side of Lago de Atitlán; 6900 feet; 14° 42', 91° 07'.
- GOLFO DULCE = Santo Domingo, Puntarenas, Costa Rica. Small port on the western shore of the large Golfo Dulce near the border of Panamá; 8° 32', 83° 17'.
- GRANADA, GRANADA, NICARAGUA. City on the northwestern shore of Lago de Nicaragua; 11° 56', 85° 57'.
- GRANADA, VERACRUZ, MÉXICO. Not located.
- GRENADA. See Granada, Nicaragua.
- GREYTOWN OR GREY TOWN. See San Juan del Norte.
- GUACHINANGO. See Huauchinango.
- GUADALAJARA, JALISCO, MÉXICO. Capital city of the state of Jalisco and second largest city in México; 5220 feet; 20° 40', 103° 20'.
- GUADALUPE = Gustavo A. Madero, Distrito Federal, México. Guadalupe is a very common place name in México. As used in the "Biologia," however, it probably refers to the northern suburb of the city of México in which the famous shrine of Nuestra Señora de Guadalupe is located; 7400 feet; 19° 29', 99° 07'. In the Neuroptera volume of the "Biologia" this particular locality is specified. Variants of the name include Villa de Guadalupe and Guadalupe Hidalgo.
- GUADELUPE I[SLAND] = Isla de Guadalupe, Baja California Norte, México. Island about 260 km. off the west coast of the peninsula of Baja California;



29° 00', 118° 16'.

GUAITIL. See Guaitil de Pirrís.

GUAITIL DE PIRRÍS, SAN JOSÉ, COSTA RICA. Not located but said by Carriker (1910, p. 342) to be on the road from San José to Pozo Azul de Pirrís not far from San Ignacio de Acosta; 4000± feet; 9° 48', 84° 09'.

GUAJUCO = Cañon del Huajuco, Nuevo León, México. Canyon situated about 11 km. west of Monterrey; 1700± feet; 25° 40', 100° 24'.

GUALÁN, ZACAPA, GUATEMALA. Town on the railroad about 25 km. northeast of Zacapa, Atlantic slope; 15° 07', 89° 21'.

GUANACASTE, COSTA RICA. Westernmost province of Costa Rica.

GUANAJUATO, MÉXICO. State in central México and the capital of the state; city at 6835 feet; 21° 01', 101° 15'. Guanajuato alone probably refers to the city in most cases.

GUANAXUATO. See Guanajuato.

GUÁPILES, LIMÓN, COSTA RICA. Town in the northwestern part of Limón near the terminus of the railroad; 800 feet; 10° 13', 83° 46'.

GUATEMALA CITY = Guatemala, Guatemala, Guatemala. National capital; 4850 feet; 14° 37', 90° 30'.

GUATUSO, CARTAGO, COSTA RICA. Settlement about 15 km. northeast of Cartago; 4700± feet; 9° 53', 83° 48'. This is not the San Rafael de Guatuso in the province of Alajuela.

GUAYMAS, SONORA, MÉXICO. Town on the coast in southern Sonora; 27° 56', 110° 54'.

GUERRERO, MÉXICO. State in southwestern México.

GUYACO, MÉXICO. Not located.

GUZMÁN, CHIHUAHUA, MÉXICO. Railroad station on the Laguna de Guzmán in northern Chihuahua 108 km. southwest of Ciudad Juárez and 104.5 km. north-northeast of Casas Grandes; 4400 feet; 31° 13', 107° 27'.

HACIENDA DE BLEADOS = Bledos, San Luis Potosí, México. Settlement 35 km. south-southwest of the city of San Luis Potosí; 6000± feet; 21° 51', 101° 07'.

HACIENDA DE LA IMAGEN, GUERRERO, MÉXICO. Settlement visited by the collector H. H. Smith and shown on "Biología" Map 5 (as La Imagen) at a point about 11 km. southwest of Chilpancingo and 4.5 km. north of Rincón; 4000 feet; approximately 17° 25', 99° 35'.

HACIENDA DE LA NORIA, MÉXICO. A statement of Dugès (1869–1881, p. 160) would place this ranch at about 24 km. (5 leagues) from the city of La Piedad, Michoacán (*q. v.*). Dugès did not indicate in what direction it lies from the city, however, and, since parts of Guanajuato and Jalisco are within a 24-km. radius of La Piedad, even the state cannot be specified with certainty.

HACIENDA DEL POTRERO, VERACRUZ, MÉXICO. A Sumichrast locality stated in the "Biología" (Hymenoptera, vol. 1, p. 278) to be near Córdoba (see Córdoba).

HACIENDA DE SAN MIGUELITO. See Sierra de San Miguelito.

HACIENDA DE SANTA CLARA, SAN LUIS POTOSÍ, MÉXICO. A ranch in the mountains of the Huasteca Potosina (*q. v.*).

HELECHALES, COSTA RICA. Not located.

HERMOSILLO, SONORA, MÉXICO. Capital of Sonora; 777 feet; 29° 04', 110° 58'.

HIGUITO = El Higuito, San José, Costa Rica. Settlement about 10 km. southeast of San José; 9° 51', 84° 02'.

HONDO RIVER. See Río Hondo.

HUACA, NICARAGUA. Not located.

HUACHINANGO. See Huauchinango.

HUAHUAPAN. See Huajuapán.

HUAJUAPAN, OAXACA, MÉXICO. Town in northern Oaxaca; 5510 feet;  $17^{\circ} 48'$ ,  $97^{\circ} 46'$ . It is also called Huajuapán de León.

HUANCHINANGO. See Huauchinango.

HUASTEC, MÉXICO. Not located. This name may be a variant of Huasteca, which is apparently a name for the mountainous region of eastern central México. Possibly it refers to the Huasteca Potosina (*q. v.*). In the "Biología" Calvert (Neuroptera, p. 332) lists it as a synonym of Huastepéc but rightly questions this elsewhere (Neuroptera, p. vii).

HUASTECA DE SAN LUIS POTOSÍ. See Huasteca Potosina.

HUASTECA POTOSINA, SAN LUIS POTOSÍ, MÉXICO. Mountainous, sparsely populated region in extreme southern San Luis Potosí, limited, roughly, by Ciudad de Valles and Lagunilla on the west and by the border of Veracruz on the east.

HUASTEPEC. See Huastec.

HUATUSCO, VERACRUZ, MÉXICO. City in western central Veracruz 29 km. north of Córdoba; 4409 feet;  $19^{\circ} 09'$ ,  $96^{\circ} 57'$ .

HUAUCHINANGO, PUEBLA, MÉXICO. Small city in northern Puebla 69 km. east of Pachuca, Hidalgo; 4900 feet;  $20^{\circ} 11'$ ,  $98^{\circ} 03'$ .

HUAZTEC. See Huastec.

HUETAMO, MICHOACÁN, MÉXICO. Large town in southeastern Michoacán; 1404 feet;  $18^{\circ} 35'$ ,  $100^{\circ} 53'$ .

HUITZILAC, MORELOS, MÉXICO. Small town 12.5 km. north of Cuernavaca;  $8000 \pm$  feet;  $19^{\circ} 02'$ ,  $99^{\circ} 16'$ .

HUITZO = Telixtlahuaca, Oaxaca, México. Village on the railroad 32 km. northwest of the city of Oaxaca;  $6000 \pm$  feet;  $17^{\circ} 18'$ ,  $96^{\circ} 54'$ .

HURCHIHUITLE = Huichihuitle, México. Not located.

IGUALA, GUERRERO, MÉXICO. City in northern central Guerrero; 2398 feet;  $18^{\circ} 21'$ ,  $99^{\circ} 32'$ .

ILE DE MAGDALENA. See Isla Santa Magdalena.

ILE (OR ILES) DE TRES MARÍAS. See Islas Tres Marías.

IRAPUATO, GUANAJUATO, MÉXICO. Industrial city in western Guanajuato; 5838 feet;  $20^{\circ} 41'$ ,  $101^{\circ} 28'$ .

IRAZÚ, CARTAGO, COSTA RICA. Settlement about 26 km. northeast of San José and 8 km. east of Volcán de Irazú;  $9^{\circ} 58'$ ,  $83^{\circ} 49'$ .

ISABEL, MÉXICO. Not identified.

ISLA SANTA MAGDALENA, BAJA CALIFORNIA SUR, MÉXICO. Large island just off the west coast of the peninsula of Baja California;  $24^{\circ} 55'$ ,  $112^{\circ} 15'$ . The name Isla Magdalena is also used.

ISLAND OF SAN JOSÉ. See San José Island.

ISLAS TRES MARÍAS, NAYARIT, MÉXICO. Group of islands (María Cleofas, María Magdalena, María Madre, and San Juanito) off the west coast of Nayarit;  $21^{\circ} 30'$ ,  $106^{\circ} 30'$ .

ISTAPA = Ixtapa, Oaxaca, México. Village 32 km. west of Nochixtlán;  $7000 \pm$  feet;  $17^{\circ} 30'$ ,  $97^{\circ} 32'$ .

ISTAPAN = Ixtapan, México. Not identified. There are settlements of this name in the states of México, Michoacán, Oaxaca, and Nayarit.

ISTEPEC. See Istepec.

ISTHMUS OF DARIÉN, DARIÉN, PANAMÁ. The isthmus is the narrow part of the southernmost province.

ISTHMUS OF TEHUANTEPEC. See Istmo de Tehuantepec.

ISTMO DE TEHUANTEPEC, MÉXICO. Isthmus between the Atlantic and Pacific oceans in southern México;  $17^{\circ} 00'$ ,  $95^{\circ} 00'$ . It is an area of generally low elevation and includes parts of the states of Oaxaca, Veracruz, and Chiapas.

ISTOPAN. See Istapan.

ITLACOTALPAN, MÉXICO. Not located.

IXTACALCO, DISTRITO FEDERAL, MÉXICO. Southeastern suburb of the city of México; 7400 feet;  $19^{\circ} 23'$ ,  $99^{\circ} 07'$ .

IXTACCHUATL, MÉXICO AND PUEBLA, MÉXICO. Volcanic mountain on the border of México and Puebla southeast of the city of México; summit at 17,343 feet;  $19^{\circ} 11'$ ,  $98^{\circ} 39'$ .

IXTPEC, MÉXICO. Not identified. The locality is either the town of Ixtepec, Oaxaca, on the trans-isthmian railroad 14 km. north-northwest of Juchitán ( $16^{\circ} 34'$ ,  $95^{\circ} 00'$ ) or the village of Ixtepec, Veracruz, near Coscomatepec ( $19^{\circ} 02'$ ,  $97^{\circ} 03'$ ).

IXTLÁN, MÉXICO. Not identified. There are three settlements of this name in México, all of which are shown on the "Biologia" maps. These are Ixtlán (de Juárez), Oaxaca, 39 km. northeast of Oaxaca ( $6000 \pm$  feet;  $17^{\circ} 20'$ ,  $96^{\circ} 29'$ ); Ixtlán, Michoacán, 21 km. southeast of La Barca, near Lago de Chapala ( $6000 \pm$  feet;  $20^{\circ} 11'$ ,  $102^{\circ} 24'$ ); and Ixtlán (del Río), Nayarit, in the southern part of the state (3395 feet;  $21^{\circ} 02'$ ,  $104^{\circ} 22'$ ).

IZABAL, IZABAL, GUATEMALA. Settlement on the south shore of Lago de Izabal;  $1500 \pm$  feet;  $15^{\circ} 24'$ ,  $89^{\circ} 08'$ .

IZALCO, SONSONATE, EL SALVADOR. City about 6 km. northeast of Sonsonate;  $13^{\circ} 45'$ ,  $89^{\circ} 40'$ .

IZAMAL, YUCATÁN, MÉXICO. Town in northern Yucatán 64 km. east of Mérida;  $20^{\circ} 56'$ ,  $89^{\circ} 01'$ .

IZÚCAR. See Izúcar de Matamoros.

IZÚCAR DE MATAMOROS, PUEBLA, MÉXICO. City in southwestern Puebla; 4765 feet;  $18^{\circ} 36'$ ,  $98^{\circ} 28'$ .

JACALE, MÉXICO. As suggested by Champion (Coleoptera, vol. 4, pt. 4, p. 142), this is probably an error for Jacala, Hidalgo;  $4000 \pm$  feet;  $21^{\circ} 01'$ ,  $99^{\circ} 11'$ .

JACONA, MICHOACÁN, MÉXICO. Small town in western Michoacán a few kilometers south of Zamora; 5200 feet;  $19^{\circ} 58'$ ,  $102^{\circ} 16'$ .

JALAPA, VERACRUZ, MÉXICO. Capital of the state of Veracruz; 4681 feet;  $19^{\circ} 32'$ ,  $96^{\circ} 55'$ . The official name of the city is Jalapa Enríquez. According to Bates (Coleoptera, vol. 1, pt. 1, p. 256), "Herr Höge, in labelling his large collection on his return to Europe, attached by mistake the locality 'Jalapa' to many of the [city of] Oaxaca species, and vice versa 'Oaxaca' to species found at Jalapa."

JALCOMULCO, VERACRUZ, MÉXICO. Town 27 km. southeast of Jalapa;  $1500 \pm$  feet;  $19^{\circ} 20'$ ,  $96^{\circ} 45'$ .

JALISCO, MÉXICO. State in western México.

JALTENGO = Jaltenco, México, México. Settlement north of the city of México and 4.5 km. south of Zumpango, México;  $8000 \pm$  feet;  $19^{\circ} 45'$ ,  $99^{\circ} 06'$ .

JARAL, GUANAJUATO, MÉXICO. Town in southern Guanajuato 14 km. east of Valle de Santiago;  $6000 \pm$  feet;  $20^{\circ} 22'$ ,  $101^{\circ} 04'$ . The official name is Jaral

del Progreso.

JAVALÍ = Jabalí, Chontales, Nicaragua. Settlement a few kilometers south of Santo Domingo in the northern part of the department;  $12^{\circ} 16'$ ,  $85^{\circ} 01'$ .

JESÚS MARÍA, ALAJUELA, COSTA RICA. Settlement on the river of the same name about 12 km. from the west coast in the southwestern part of Alajuela;  $9^{\circ} 57'$ ,  $84^{\circ} 35'$ .

JIMÉNEZ, LIMÓN, COSTA RICA. Village near the end of the railroad at the edge of the foothills of Volcán de Turrialba, on the Atlantic slope;  $10^{\circ} 13'$ ,  $83^{\circ} 43'$ .

JIMULCO = Jomulco, Zacatecas, México. Settlement about 8 km. northwest of Jerez de García Salinas (= Ciudad García);  $7000 \pm$  feet;  $22^{\circ} 43'$ ,  $103^{\circ} 06'$ .

JOJUTLA, MORELOS, MÉXICO. Town on the railroad in southern Morelos 33.5 km. south of Cuernavaca;  $2500 \pm$  feet;  $18^{\circ} 37'$ ,  $99^{\circ} 11'$ .

JOLOS, MÉXICO. Not located. This is possibly the same locality as Yolos (*q. v.*).

JOYABAJ, EL QUICHÉ, GUATEMALA. Indian village in the extreme southeast of El Quiché 35 km. east of Santa Cruz del Quiché and south of the Sierra de Chuacús; 4300 feet;  $15^{\circ} 00'$ ,  $90^{\circ} 44'$ .

JUANACATLÁN, JALISCO, MÉXICO. There are three settlements of this name in Jalisco. The largest of these, the only one shown on the "Biología" map, and almost certainly the locality in question, is a town in the central part of the state 24 km. north-northeast of Chapala and about the same distance southeast of Guadalajara;  $4000 \pm$  feet;  $20^{\circ} 31'$ ,  $103^{\circ} 10'$ .

JUAN VÑAS, CARTAGO, COSTA RICA. Village on the eastern slope of Volcán de Turrialba on the highway 9 km. southwest of Turrialba;  $3000 \pm$  feet;  $9^{\circ} 54'$ ,  $83^{\circ} 45'$ .

JUÁREZ. See Ciudad Juárez. The city was once known also as Paso del Norte.

JUQUILA, OAXACA, MÉXICO. Small town in southwestern Oaxaca about 120 km. south-southwest of Oaxaca and 80 km. west-southwest of Miahuatlán; 4900 feet;  $16^{\circ} 14'$ ,  $97^{\circ} 18'$ . (See Hooper, 1952, p. 235.)

LA CALDERA, CHIRIQUÍ, PANAMÁ. Village on the Pacific slope about 10 km. northeast of Dolega;  $1200 \pm$  feet;  $8^{\circ} 38'$ ,  $82^{\circ} 29'$ .

LA CALDERA DE SAN RAMÓN = San Ramón, Alajuela, Costa Rica. Settlement on the highway in southern Alajuela;  $4000 \pm$  feet;  $10^{\circ} 06'$ ,  $84^{\circ} 28'$ .

LA CHORRERA, PANAMÁ, PANAMÁ. Town on the highway in the lowlands about 25 km. southwest of the city of Panamá;  $8^{\circ} 52'$ ,  $79^{\circ} 47'$ .

LA CHUPAROSA. See Chuparosa.

LA FLOR, CARTAGO, COSTA RICA. Settlement about 10 km. northeast of Cartago;  $4000 \pm$  feet;  $9^{\circ} 53'$ ,  $83^{\circ} 50'$ .

LA GAVIA, SANTA ROSA, GUATEMALA. Small settlement near the cerro of the same name in extreme western Santa Rosa; shown on "Biología" Map 8 about 30 km. southeast of Escuintla; 2000 feet;  $14^{\circ} 10'$ ,  $90^{\circ} 28'$ .

LAGO DE CHALCO, MÉXICO, MÉXICO. This name presumably refers to the dry lake bed west of the city of Chalco, southeast of the city of México;  $7000 \pm$  feet;  $19^{\circ} 15'$ ,  $98^{\circ} 55'$ .

LAGO DE MANAGUA, MANAGUA, NICARAGUA. Lake northwest of Lago de Nicaragua;  $12^{\circ} 21'$ ,  $86^{\circ} 21'$ .

LAGO DE NICARAGUA, NICARAGUA. Largest lake in Central America.

LAGOS. See Lagos de Moreno.

LAGOS DE MORENO, JALISCO, MÉXICO. City in northwestern Jalisco; 6368 feet;  $21^{\circ} 21'$ ,  $101^{\circ} 15'$ . There are several references in the Coleoptera volumes of the

"Biología" to "Lagos in Aguas Calientes," but there is apparently no locality of that name in the state of Aguascalientes.

LAGUNA, COAHUILA, MÉXICO. Railroad station 45 km. west of Parras; 4000± feet; 25° 27', 102° 35'.

LAGUNA, GUATEMALA, GUATEMALA. Settlement on the western shore of Lago de Amatitlán; 14° 27', 90° 35'.

LAGUNA PITA = Laguna de la Pita, Darién, Panamá. Large lake at about the center of Darién on the Pacific slope; approximately 8° 20', 77° 56'.

LA JOYA, SAN LUIS POTOSÍ, MÉXICO. Not identified. There are several settlements of the name La Joya or Joya in the state of San Luis Potosí. The one in question is probably either the village of Joya 4.5 km. southeast of the city of San Luis Potosí (22° 06', 100° 56') or the railroad station of that name about 64 km. northeast of this city (22° 30', 100° 26').

LAKE CHAPALA = Lago de Chapala, Jalisco and Michoacán, México. Largest lake in México; 5000 feet; 20° 15', 103° 00'.

LAKE OF TEXCOCO = Lago de Texcoco, México, México. Dry lake bed east of the city of México; 7400± feet; 19° 30', 99° 00'.

LAKE NICARAGUA. See Lago de Nicaragua.

LAKE WEST OF GUATEMALA CITY, GUATEMALA. Probably Lago de Atitlán in the department of Sololá, the largest lake in Guatemala; about 14° 40', 91° 10'.

LA LAGUNA, COSTA RICA. Not identified. There is a Cerro La Laguna in the province of San José (9° 37', 84° 02') and villages called "Laguna" in the provinces of Alajuela (10° 13', 84° 24') and Guanacaste (10° 31', 84° 58').

LAMPAZOS (DE NARANJO), NUEVO LEÓN, MÉXICO. Town in northern Nuevo León near the border of Coahuila; 991 feet; 27° 01', 100° 31'.

LA NORIA, SINALOA, MÉXICO. Small town on the coastal plain in southern Sinaloa 33.5 km. north-northeast of Mazatlán; 23° 30', 106° 18'.

LANQUÍN, ALTA VERAPAZ, GUATEMALA. Settlement in the mountains about 40 km. northeast of Cobán and 18 km. due west of Santa María Cahabón; 15° 34', 90° 03'. The locality appears as San Agustín Lanquín on old maps.

LA PALMA, CARTAGO, COSTA RICA. Settlement about 15 km. northeast of San José; 5000± feet; 10° 03', 83° 58'.

LA PALMA, GUANACASTE, COSTA RICA. Not identified. There are two settlements of this name in the province, one on a secondary highway 19 km. southeast of Las Cañas (10° 17', 85° 04') and the other on the peninsula of Nicoya 4 km. west of the town of Nicoya (10° 08', 85° 28').

LA PARADA, OAXACA, MÉXICO. Hacienda and important collecting site on the north slope of the mountains west of Cerro San Felipe, which is just north of the city of Oaxaca; 7900 feet; about 17° 10', 96° 40'. (See Goldman, 1951, pp. 215-216.) Sclater (1858, p. 295) gives the elevation as "about 10,000 ft."

LA PIEDAD = La Piedad Cavadas, Michoacán, México. Town on the Río Lerma near the western end of the border between the states of Guanajuato and Michoacán; 5610 feet; 20° 21', 102° 00'.

LA PUERTA RANCHO, TAMAULIPAS, MÉXICO. Not located.

LAS ÁNIMAS, MÉXICO. Not identified. This name is common in México, having been applied to settlements in a number of states.

LAS BOCAS, DURANGO, MÉXICO. Settlement on the Río Florida in extreme northern Durango near Villa Ocampo; 6800 feet; approximately 26° 25', 105° 25'.

LAS DELICIAS, COSTA RICA. Not located.

- LAS ISLAS DEL RÍO USUMACINTA, TABASCO, MÉXICO. The Río Usumacinta joins the Río Grijalva south of Frontera, at  $18^{\circ} 24'$ ,  $92^{\circ} 38'$ . The particular islands in the river are not identified in the "Biologia."
- LAS LORAS NEAR PUNTARENAS. See Puntarenas.
- LAS MERCEDES, QUEZALTENANGO, GUATEMALA. Plantation on the Pacific slope about 17 km. west of Volcán de Santa María and near the Río Naranjo;  $3000 \pm$  feet; shown on "Biologia" Map 8 at about  $14^{\circ} 42'$ ,  $91^{\circ} 45'$ .
- LAS MINAS, TABASCO, MÉXICO. Not identified. The "Biologia" specifies mines near Frontera (*q. v.*) but does not otherwise identify them.
- LAS NUBES, QUEZALTENANGO, GUATEMALA. Coffee plantation on the Pacific slope of Cerro Zunil about 17 km. south of Quezaltenango; 4050 feet; shown on "Biologia" Map 8 at about  $14^{\circ} 40'$ ,  $91^{\circ} 28'$ .
- LA SOLEDAD. See Soledad, Guerrero.
- LAS PERAS = (San Miguel) Peras, Oaxaca, México. Settlement about 24 km. southwest of Oaxaca;  $6000 \pm$  feet;  $16^{\circ} 57'$ ,  $97^{\circ} 00'$ . Sclater (1858, p. 295) identifies this locality (as San Miguel de las Peras) as one worked by Boucard for Sallé. The place name San Miguel, cited in the "Biologia" (Coleoptera, vol. 6, first suppl., p. 16) for Sallé material, may refer to this locality.
- LAS VEGAS. See Las Vigas.
- LAS VIGAS, VERACRUZ, MÉXICO. Small town on the railroad 23 km. northwest of Jalapa; 7989 feet;  $19^{\circ} 38'$ ,  $97^{\circ} 05'$ .
- LA TINTA, ALTA VERAPAZ, GUATEMALA. Settlement in the valley of the Río Polochic southeast of Cobán and 9 km. east of Pancajché;  $15^{\circ} 20'$ ,  $89^{\circ} 57'$ .
- LA UNIÓN, LA UNIÓN, EL SALVADOR. Capital of the department, on the northwestern shore of the Golfo de Fonseca;  $13^{\circ} 20'$ ,  $87^{\circ} 51'$ .
- LA URRUCA. See La Uruca.
- LA URUCA = Uruca, San José, Costa Rica. Settlement just northwest of the city of San José; 3700 feet;  $9^{\circ} 57'$ ,  $84^{\circ} 06'$ .
- LA VENTA, GUERRERO, MÉXICO. Village 12.5 km. northeast of Acapulco;  $16^{\circ} 54'$ ,  $99^{\circ} 49'$ .
- LEÓN, GUANAJUATO, MÉXICO. City in western Guanajuato; 6183 feet;  $21^{\circ} 07'$ ,  $101^{\circ} 40'$ .
- LEÓN, LEÓN, NICARAGUA. Second city of Nicaragua, near the Pacific coast, about 30 km. northwest of Lago de Managua;  $12^{\circ} 26'$ ,  $86^{\circ} 54'$ .
- LERDO. See Villa Lerdo.
- LERMA, CAMPECHE, MÉXICO. Village on the coast 6 km. southwest of the city of Campeche;  $19^{\circ} 48'$ ,  $90^{\circ} 36'$ .
- LIBERIA, GUANACASTE, COSTA RICA. Town on the main highway in northwestern Guanacaste;  $10^{\circ} 38'$ ,  $85^{\circ} 27'$ .
- LIMAS = Las Limas, El Paraíso, Honduras. Settlement near the border of Nicaragua about 8 km. south of El Paraíso;  $13^{\circ} 49'$ ,  $86^{\circ} 39'$ . The locality name "Limas, near Belize" given in the "Biologia" (Lepidoptera, vol. 4, p. 316) is evidently an error for Limas, Honduras.
- LIMONCITO, COSTA RICA. Not located.
- LINARES, NUEVO LEÓN, MÉXICO. City on the Pan-American Highway near the border of Tamaulipas; 1265 feet;  $24^{\circ} 52'$ ,  $99^{\circ} 34'$ .
- LINE OF RAILWAY, CANAL ZONE, PANAMÁ. Trans-isthmian railroad between Panamá and Colón; about  $9^{\circ} 10'$ ,  $79^{\circ} 47'$ .
- LION HILL, CANAL ZONE, PANAMÁ. Former station on the trans-isthmian railroad

- later submerged by the Canal. It may have been on Lion Island in Gatún Lake southeast of Gatún, at about  $9^{\circ} 14'$ ,  $79^{\circ} 55'$ .
- LION-HILL STATION. See Lion Hill.
- LIVINGSTON, IZABAL, GUATEMALA. Atlantic port on the Bahía de Amatique 20 km. northwest of Puerto Barrios;  $15^{\circ} 49'$ ,  $88^{\circ} 45'$ .
- LLANO GRANDE, BAJA VERAPAZ, GUATEMALA. Settlement near the southern border of Baja Verapaz 20 km. southwest of Salamá;  $2600 \pm$  feet; shown on "Biologia" Map 8 at about  $14^{\circ} 56'$ ,  $90^{\circ} 21'$ .
- LLANOS DE APAM = Apan, Hidalgo, México. Town in southwestern Hidalgo;  $8000 \pm$  feet;  $19^{\circ} 43'$ ,  $98^{\circ} 28'$ .
- LLANOS DE SALAZAR. See Salazar.
- LONG POINT, CAÑASO FARM, BOCAS DEL TORO, PANAMÁ. This locality is described by Calvert (1908) as "a little valley along the Cañaso River among the foothills about 5 miles inland in an airline from Chiriquí Lagoon."
- LOS ALTOS, GUATEMALA. General term for the central plateau of Guatemala.
- LOS AMATES, IZABAL, GUATEMALA. Town on the railroad about midway between Zacapa and Puerto Barrios, Atlantic slope;  $15^{\circ} 16'$ ,  $89^{\circ} 06'$ .
- LOS DIAMANTES, ESCUINTLA, GUATEMALA. Small settlement about 15 km. northwest of the town of Escuintla;  $1500 \pm$  feet;  $14^{\circ} 22'$ ,  $90^{\circ} 55'$ .
- LOS REMEDIOS, CHIHUAHUA, MÉXICO. Not identified. Three localities in Chihuahua have the name Remedios or Los Remedios. The most accessible of these is a ranch in the southeastern corner of the state 65 km. southeast of Jiménez ( $4000 \pm$  feet;  $26^{\circ} 53'$ ,  $104^{\circ} 21'$ ).
- LOS REMEDIOS = Remedios, Chiriquí, Panamá. Village on the Pacific slope in the eastern part of Chiriquí 64 km. east-southeast of David;  $8^{\circ} 14'$ ,  $81^{\circ} 49'$ .
- LOS SÁBALOS RIVER = Río Sábalo, Río San Juan [formerly Chontales], Nicaragua. River flowing into the Río San Juan near the border of Costa Rica;  $11^{\circ} 03'$ ,  $84^{\circ} 29'$ .
- LOWER CALIFORNIA. See Baja California.
- LOWER PURISIMA. See Baja Purísima.
- LUMIJÁ, CHIAPAS, MÉXICO. Rubber plantation on the Río Tulijá (a tributary of the Río Grijalva) near the northern border of Chiapas 6 km. northwest of Salto de Agua;  $17^{\circ} 38'$ ,  $92^{\circ} 23'$ .
- MACHUCA OR MACHUCA RIVER, COSTA RICA. See Río Machuca.
- MACHUCA RIVER = Río Machuca, Río San Juan [formerly Chontales], Nicaragua. Small river in the southeast emptying into the Río San Juan on the border of Costa Rica;  $10^{\circ} 54'$ ,  $84^{\circ} 18'$ .
- MAGDALENA, MÉXICO. Not located.
- MALTARTA. See Maltrata.
- MALTRATA, VERACRUZ, MÉXICO. Town on the railroad 19 km. west of Orizaba;  $9000 \pm$  feet;  $18^{\circ} 48'$ ,  $97^{\circ} 16'$ .
- MALTRATO. See Maltrata.
- MANAGUA, MANAGUA, NICARAGUA. Capital and largest city of the republic, on the southern shore of Lago de Managua;  $12^{\circ} 10'$ ,  $86^{\circ} 17'$ .
- MANANTIEL, MÉXICO. Not identified. There are settlements of the name Manantial or Manantiales in several states.
- MANZANILLO, COLIMA, MÉXICO. Pacific port;  $19^{\circ} 03'$ ,  $104^{\circ} 20'$ . The state is given erroneously as Michoacán at least once in the "Biologia."
- MARAVATÍO, MICHOACÁN, MÉXICO. Village in the northeastern corner of the

- state 32 km. southeast of Acámbaro; 6627 feet;  $19^{\circ} 54'$ ,  $100^{\circ} 27'$ .
- MASAYA, MASAYA, NICARAGUA. City 30 km. southeast of Managua;  $11^{\circ} 59'$ ,  $86^{\circ} 06'$ .
- MATACHÍN, CANAL ZONE, PANAMÁ. Former station on the Panamá railroad line near Gamboa;  $9^{\circ} 06'$ ,  $79^{\circ} 42'$ .
- MATA DE LEÑA. See Rodeo.
- MATAGALPA, MATAGALPA, NICARAGUA. City on the highway in the northwestern part of Matagalpa about 96 km. north of Managua; 1940 feet;  $12^{\circ} 53'$ ,  $85^{\circ} 57'$ .
- MATAMOROS. See Izúcar de Matamoros.
- MATAMOROS, PUEBLA. See Izúcar de Matamoros.
- MATAMOROS, TAMAULIPAS, MÉXICO. City on the international border just south of Brownsville, Texas;  $25^{\circ} 53'$ ,  $97^{\circ} 30'$ .
- MATAMOROS IZÚCAR. See Izúcar de Matamoros.
- MAZAMITLA, JALISCO, MÉXICO. Village near the border of Michoacán 50 km. northeast of Ciudad Guzmán;  $5000 \pm$  feet;  $19^{\circ} 55'$ ,  $103^{\circ} 02'$ .
- MAZATENANGO, SUCHITEPÉQUEZ, GUATEMALA. City on the railroad and on the highway on the Pacific slope southwest of Lago de Atitlán; 1250 feet;  $14^{\circ} 32'$ ,  $91^{\circ} 30'$ .
- MAZATLÁN, SINALOA, MÉXICO. Pacific port in the southern part of the state;  $23^{\circ} 13'$ ,  $106^{\circ} 25'$ .
- MÉDANO BLANCO, SONORA, MÉXICO. Settlement at the north end of the Bahía de Santa Bárbara 47 km. southwest of Navojoa;  $26^{\circ} 42'$ ,  $109^{\circ} 38'$ .
- MEDELLÍN = Medellín de Bravo, Veracruz, México. Town on the Río Jamapa 16 km. south of the city of Veracruz;  $19^{\circ} 04'$ ,  $96^{\circ} 09'$ .
- MÉRIDA, YUCATÁN, MÉXICO. Capital of the state of Yucatán;  $20^{\circ} 58'$ ,  $89^{\circ} 37'$ .
- MESA VERDE, PENINSULA OF BAJA CALIFORNIA, MÉXICO. Not located.
- MESCALA. See Mexcala.
- MESCALES. See Mezcales.
- MESQUITIC = Mezquitic, Jalisco, México. Village on the Río Mezquitic in extreme northern Jalisco 60 km. northwest of Colotlán;  $2000 \pm$  feet;  $22^{\circ} 23'$ ,  $103^{\circ} 41'$ .
- MEXCALA, GUERRERO, MÉXICO. Village on the Río Balsas between Iguala and Chilpancingo; 1350 feet;  $17^{\circ} 56'$ ,  $99^{\circ} 37'$ .
- MEXICAN BOUNDARY, MÉXICO. Boundary between the United States and México.
- MÉXICO, DISTRITO FEDERAL, MÉXICO. National capital; 7349 feet;  $19^{\circ} 24'$ ,  $99^{\circ} 09'$ . The official name of the city is Ciudad de México; the vernacular name is simply México.
- MEXICO CITY. See México.
- MEXTITLÁN, GUERRERO, MÉXICO. Former railroad station 14 km. southwest of Iguala; 2400 feet;  $18^{\circ} 18'$ ,  $99^{\circ} 38'$ .
- MEZCALES, SINALOA, MÉXICO. Settlement about 8 km. north of Culiacán;  $24^{\circ} 51'$ ,  $107^{\circ} 24'$ .
- MIACATLÁN, MORELOS, MÉXICO. Village 35 km. southwest of Cuernavaca;  $4000 \pm$  feet;  $18^{\circ} 46'$ ,  $99^{\circ} 22'$ .
- MICHOACÁN, MÉXICO. State in southern México.
- MILLAN, VERACRUZ, MÉXICO. Not located.
- MILPAS, MÉXICO. Not identified. There are three settlements called either Milpas or Las Milpas in each of the states of Durango, Sinaloa, and Sonora. In the Lepidoptera volumes of the "Biologia" the state of Durango is occasionally



specified, but this is questioned on page 143 of *Lepidoptera Heterocera* (vol. 4).

MINA DE ZIMAPÁN. See Zimapán.

MINAS DE CALMALLÍ = Calmellí, Baja California Norte, México. Mining camp near the southern border of the state. The locality is listed by the United States Board on Geographic Names gazetteer at 28° 14', 113° 33' (as Calmellí) but is shown on the "World aeronautical charts" at 28° 05', 113° 23' (as Calmallí). It is described by Goldman (1951, p. 41) under the name Calmallí and is shown on the map of Michelbacher and Ross (1942, pl. 1) as Calmalli.

MINAS DE ZIMAPÁN. See Zimapán.

MINAS VIEJAS, MÉXICO. Not identified. There are settlements of this name in Nuevo León and San Luis Potosí.

MINATITLÁN, VERACRUZ, MÉXICO. City on the northern side of the Istmo de Tehuantepec 23 km. southwest of Coatzacoalcas; 17° 59', 94° 31'.

MINERAL DE JIMOPÁN. See Zimapán.

MINERAL DE LA LUZ, MÉXICO. Not located.

MINERAL DEL CEDRO, MÉXICO. Not located.

MINERAL DEL CHICO, HIDALGO, MÉXICO. Settlement 10 km. north of Pachuca; 8000± feet; 20° 13', 98° 44'.

MINERAL DEL MONTE, HIDALGO, MÉXICO. Mining village 6 km. east of Pachuca; 9000 feet; 20° 08', 98° 40'.

MINERAL DEL ORO, MÉXICO. Not located.

MINERAL DEL ZIMAPÁN. See Zimapán.

MINERAL EL CHICO. See Mineral del Chico.

MIRADOR, VERACRUZ, MÉXICO. As used in the "Biologia," Mirador or El Mirador probably always refers to the hacienda of Mirador in western central Veracruz. Hooper (1952, p. 236) places it 43 km. south of Jalapa and about 16 km. north-northeast of Huatusco; 19° 17', 96° 54'. Goldman's account (1951, pp. 275-276) of his visit to the hacienda in 1894 includes the following information: "The hacienda had been in the possession of the Sartorius family for many years. It is located on the slope of the mountains at 3,800 feet, with higher and lower levels easily accessible, in a region presenting faunal and floral richness in extraordinary variety. Elder members of the Sartorius family were interested in natural history, . . . and the hacienda was visited by various early naturalists, including Sumichrast, who made extensive collections there."

MIRAFLORES, BAJA CALIFORNIA SUR, MÉXICO. Village in the cape region 37 km. north-northwest of San José del Cabo; 23° 21', 109° 45'.

MIRANDILLA, ESCUINTLA, GUATEMALA. Settlement on the Pacific slope about 16 km. northwest of Escuintla; 1700 feet; shown on "Biologia" Map 8 at about 14° 21', 90° 52'.

MIRAVALLS = Hacienda Miravalles, Guanacaste, Costa Rica. Large cattle ranch on the slopes of Volcán de Miravalles on the border of Guanacaste and Alajuela provinces in northern Costa Rica; 1500 to 2000 feet; 10° 41', 85° 14'.

MISANTLA, VERACRUZ, MÉXICO. Large town in the central part of the state 45 km. north-northeast of Jalapa; 1345 feet; 19° 56', 96° 50'.

MITLA, OAXACA, MÉXICO. Small town and site of Zapotecan ruins about 38 km. southeast of the city of Oaxaca; 5400 feet; 16° 55', 96° 24'.

MIXCOAC, DISTRITO FEDERAL, MÉXICO. Southwestern suburb of the city of México (*q. v.*).

- MOBANO, COAHUILA, MÉXICO. Not located.
- MOCHITLÁN, GUERRERO, MÉXICO. Village 22 km. southeast of Chilpancingo; 4000± feet; 17° 30', 99° 18'.
- MOMOTOMBO, LEÓN, NICARAGUA. Village on the northwestern shore of Lago de Managua 10 km. west of Volcán de Momotombo; 12° 24', 86° 37'.
- MONCLAVA, COAHUILA, MÉXICO. City in the eastern part of the state; 1931 feet; 26° 54', 101° 25'.
- MONTELOVEZ, COAHUILA, MÉXICO. Not located.
- MONTEMORELOS, NUEVO LEÓN, MÉXICO. Small city about 72 km. southeast of Monterrey; 1608 feet; 25° 12', 99° 49'.
- MONTE REDONDO = Rancho Redondo, Cartago, Costa Rica. Settlement in the Cordillera de Talamanca south of San José; 4000± feet; 9° 59', 83° 57'.
- MONTE REDONDO, MÉXICO. Not identified. There are settlements of this name in Jalisco, Nuevo León, and Tamaulipas.
- MONTE RETONDO. See Monte Redondo, Costa Rica.
- MONTERREY, NUEVO LEÓN, MÉXICO. Capital of the state of Nuevo León; 1762 feet; 25° 40', 100° 19'.
- MONTEZUMA = Moctezuma, Chihuahua, México. The locality in question is very probably the railroad station of Moctezuma in the northern central part of the state 48 km. south of Villa Ahumada; 4300 feet; 30° 06', 106° 31'. There is also a village of Moctezuma in western Chihuahua 70 km. southwest of Nuevo Casas Grandes (8500± feet; 29° 52', 108° 17').
- MORALES, IZABAL, GUATEMALA. Junction on the railroad east of Lago de Izabal about 40 km. from Puerto Barrios; 15° 28', 88° 48'.
- MORELEÓN, GUANAJUATO, MÉXICO. City near the border of Michoacán south of Irapuato; 5847 feet; 22° 44', 97° 52'.
- MORELIA, MICHOACÁN, MÉXICO. Capital of the state of Michoacán; 6234 feet; 19° 42', 101° 07'.
- MORELOS, MÉXICO. Small state in southern México, south of the Distrito Federal.
- MORENAS, MÉXICO. Not located.
- MOSQUITO COAST = Costa de Mosquitos, Zelaya, Nicaragua. Atlantic coast line of Nicaragua.
- MOSQUITO TERRITORY, COLÓN, HONDURAS. Either the Caribbean coast of Honduras in general or the former department of Comarca de la Mosquitia, on the northeastern coast, now included in the department of Colón.
- MOTAGUA VALLEY. See Río Motagua.
- MOTZORONGO, VERACRUZ, MÉXICO. Railroad station and hacienda 27 km. southeast of Córdoba; 800 feet; 18° 39', 96° 44'. (See Goldman, 1951, p. 277.)
- MOUNT ALVAREZ. See Alvarez Mountains.
- MOUNT POÁS. See Volcán de Poás.
- MOYOAPAM = Moyopan, Guerrero, México. Village 14 km. northwest of Chilpancingo; 6000± feet; 17° 39', 99° 37'.
- NANCITO, CHIRIQUÍ, PANAMÁ. Settlement on the highway on the Pacific slope in eastern Chiriquí; 800 feet; 8° 15', 81° 42'.
- NAVARETE. See Navarrete.
- NAVARRETE, NAYARIT, MÉXICO. Village 24 km. northwest of Tepic; 21° 39', 105° 07'.
- NAVARRO, CARTAGO, COSTA RICA. Village on the Atlantic slope 8 km. south of Cartago; 2500 to 3000 feet; 9° 49', 83° 52'.

- NEPANTLA, MÉXICO, MÉXICO. Village about 16 km. south-southwest of Amecameca; 6450 feet; 18° 58', 98° 50'.
- NICOYA, GUANACASTE, COSTA RICA. Town on the highway at about the center of the peninsula of Nicoya 53 km. south of Liberia; 10° 09', 85° 27'.
- NOGALES, SONORA, MÉXICO. City on the international border south of Nogales, Arizona; 3867 feet; 31° 20', 110° 56'.
- NOPALACA. See Nopalucan.
- NOPALUCAN, PUEBLA, MÉXICO. Town 37 km. northeast of the city of Puebla; 7727 feet; 19° 13', 97° 49'.
- NUEVO LAREDO, TAMAULIPAS, MÉXICO. City on the international border south of Laredo, Texas; 27° 30', 99° 31'.
- OAXACA, MÉXICO. The name Oaxaca in the "Biologia" usually refers to the city of Oaxaca (de Juárez), the capital of the state of Oaxaca; 17° 03', 96° 43'. Occasionally (e.g., Neuroptera, p. ix), the term Oaxaca City is used. In a few cases the context indicates that Oaxaca refers to the state rather than to the city, and in a few others the state of Oaxaca is definitely specified.
- OAXACA CITY. See Oaxaca.
- OBISPO = Bas Obispo, Canal Zone, Panamá. Former station on the trans-isthmian railroad near Gamboa; 9° 06', 79° 42'.
- OBRAJUELO, GUANAJUATO, MÉXICO. Settlement 18 km. west of the city of Querétaro, Querétaro; 6000 feet; 20° 35', 100° 33'.
- OCOTLÁN, JALISCO, MÉXICO. City in eastern Jalisco north of Lago de Chapala; 5000 feet; 20° 21', 102° 46'.
- OMEALCA, VERACRUZ, MÉXICO. Railroad station 18 km. southeast of Córdoba; 1500± feet; 18° 44', 96° 48'.
- OMETEPÉ = Isla de Ometepé, Rivas, Nicaragua. Largest island in Lago de Nicaragua, about 8 km. off shore; highest point at 4500± feet; 11° 30', 85° 35'.
- OMILTEME = Omiltemi, Guerrero, México. Settlement 16 km. west-southwest of Chilpancingo; 8000 feet; 17° 30', 99° 40'.
- OPELOUZES, MÉXICO. Not located.
- ORIZABA, VERACRUZ, MÉXICO. Industrial city in central Veracruz; 4029 feet; 18° 51', 97° 06'.
- OROSI, CARTAGO, COSTA RICA. Town on the Río Reventazón 13 km. southeast of Cartago; 9° 48', 83° 52'.
- OSTUNCALCO = San Juan Ostuncalco, Quezaltenango, Guatemala. Settlement in the mountains near the border of San Marcos about 10 km. northwest of the city of Quezaltenango; 8000± feet; 14° 51', 91° 37'. The locality is listed in error as in México at least once in the "Biologia."
- OTUMBA, MÉXICO, MÉXICO. Town northeast of the city of México; 8000± feet; 19° 42', 98° 45'.
- PACAYAS, CARTAGO, COSTA RICA. Town at the foot of Volcán de Irazú 15 km. northeast of Cartago; 9° 55', 83° 48'.
- PACHOC, TOTONICAPÁN, GUATEMALA. Indian village in the highlands about 16 km. northeast of Totonicapán; 9200 feet; shown on "Biologia" Map 8 at 15° 00', 91° 14'.
- PACHUCA, HIDALGO, MÉXICO. Capital of the state of Hidalgo; 8200 feet; 20° 07', 98° 44'.
- PACUARE DEL SUR = Río Pacuare, Limón, Costa Rica. Large river flowing north along the border of the provinces of Limón and Cartago and then turning

- northeastward to empty in the Caribbean Sea about 40 km. north of Puerto Limón at  $10^{\circ} 14'$ ,  $83^{\circ} 17'$ . The southern Pacuare (del Sur) may refer to one of the southern arms (brazos) of the river; these are inland at approximately  $9^{\circ} 43'$ ,  $83^{\circ} 32'$ . Calvert (Neuroptera, p. xv) gives the province as Puntarenas.
- PALÍN, ESCUINTLA, GUATEMALA. Town on the main highway in the northern part of the department about 15 km. southwest of Lago de Amatitlán;  $3700 \pm$  feet;  $14^{\circ} 24'$ ,  $90^{\circ} 41'$ .
- PALMARES, ALAJUELA, COSTA RICA. Town on the central plateau about midway between the town of Alajuela and the coast at Puntarenas;  $4000 \pm$  feet;  $10^{\circ} 03'$ ,  $84^{\circ} 26'$ .
- PALMARITO, SINALOA, MÉXICO. Settlement or collecting site on the Pacific coast near Mazatlán;  $23^{\circ} 45'$ ,  $106^{\circ} 28'$ .
- PALO VERDE, MÉXICO. Not located.
- PAMPOJILAJ = Pampojilá, Sololá, Guatemala. Settlement on a minor road to the Pacific coast about 6 km. south of San Lucas Tolimán and Lago de Atitlán;  $14^{\circ} 30'$ ,  $91^{\circ} 08'$ .
- PANAJACHEL, SOLOLÁ, GUATEMALA. Market town on the northeastern shore of Lago de Atitlán a few kilometers southeast of Sololá; 5184 feet;  $14^{\circ} 44'$ ,  $91^{\circ} 09'$ .
- PANAMÁ, PANAMÁ, PANAMÁ. Pacific port;  $8^{\circ} 57'$ ,  $79^{\circ} 32'$ .
- PANÁN = San Miguel Panán, Sololá, Guatemala. Settlement on the Pacific slope southwest of Lago de Atitlán and about 15 km. east of Mazatenango;  $1500 \pm$  feet;  $14^{\circ} 25'$ ,  $91^{\circ} 22'$ .
- PANCAJCHÉ, ALTA VERAPAZ, GUATEMALA. Village on the railroad in the valley of the Río Polochic 32 km. west of Panzós;  $15^{\circ} 20'$ ,  $90^{\circ} 02'$ .
- PANCINA. See Panimá.
- PANIMÁ, BAJA VERAPAZ, GUATEMALA. Settlement near the northeastern border of Baja Verapaz about 30 km. northeast of Salamá; 1800 feet;  $15^{\circ} 16'$ ,  $90^{\circ} 08'$ . The name is given in error as Pancina by Godman ("Introductory Volume," p. 49).
- PANISLAHUACA. See Panistlahuaca.
- PANISTLAHUACA = Panixtlahuaca, Oaxaca, México. Village in southwestern Oaxaca 33 km. west-southwest of Juchatengo;  $4000 \pm$  feet;  $16^{\circ} 15'$ ,  $97^{\circ} 23'$ . The village is also called San Miguel Panixtlahuaca.
- PANTALEON, ESCUINTLA, GUATEMALA. Village on the highway about 22 km. west of Escuintla, Pacific slope; 1700 feet;  $14^{\circ} 20'$ ,  $91^{\circ} 00'$ .
- PANZÓS, ALTA VERAPAZ, GUATEMALA. Small town on the Río Polochic at the end of the railroad 30 km. west of Lago de Izabal;  $15^{\circ} 25'$ ,  $89^{\circ} 13'$ .
- PAPACHAL, SINALOA, MÉXICO. Settlement in central Sinaloa 86 km. southeast of Culiacán and 49 km. east-southeast of Quila;  $1000 \pm$  feet;  $24^{\circ} 18'$ ,  $106^{\circ} 45'$ .
- PARÁ. Error for Pará in Brazil.
- PARADA. See La Parada.
- PARADA CAPULALPAM. See La Parada and Calpulalpam.
- PARAÍSO, CANAL ZONE, PANAMÁ. Station on the trans-isthmian railroad midway between Panamá and Gamboa;  $9^{\circ} 02'$ ,  $79^{\circ} 37'$ .
- PARAÍSO, RETALHULEU, GUATEMALA. Settlement on the Pacific slope about 19 km. southwest of Retalhuleu;  $14^{\circ} 26'$ ,  $91^{\circ} 50'$ .
- PARAÍSO STATION. See Paraíso, Panamá.
- PARAJE NUEVO, VERACRUZ, MÉXICO. Not located.
- PARIÁN, MÉXICO. Not identified. There are several settlements of this name in

## México.

PARRAS, COAHUILA, MÉXICO. Town in southern Coahuila; 4966 feet;  $25^{\circ} 25'$ ,  $102^{\circ} 11'$ . The name Parras de la Fuente is also commonly used.

PASO ANTONIO, ESCUINTLA, GUATEMALA. Settlement on the Río María Linda southeast of Escuintla and about 16 km. from the Pacific coast; shown on "Biología" Map 8 at about  $14^{\circ} 01'$ ,  $90^{\circ} 40'$ .

PASO DEL MACHO, VERACRUZ, MÉXICO. Town on the railroad 24 km. northeast of Córdoba;  $1500 \pm$  feet;  $18^{\circ} 58'$ ,  $96^{\circ} 43'$ .

PASO DEL NORTE. See Ciudad Juárez.

PASO DE MAYO, MÉXICO. Not located.

PASO DE SAN JUAN, VERACRUZ, MÉXICO. Village 18 km. west of the city of Veracruz;  $800 \pm$  feet;  $19^{\circ} 12'$ ,  $96^{\circ} 19'$ .

PASTAPEC, MÉXICO. Not located.

PATARRÁ, SAN JOSÉ, COSTA RICA. Village on the central plateau about 7 km. southeast of the city of San José;  $4000 \pm$  feet;  $9^{\circ} 53'$ ,  $84^{\circ} 02'$ .

PATROCINIO = El Patrocinio, Baja California Sur, México. Settlement in northwestern Baja California Sur 72 km. south of San Ignacio;  $26^{\circ} 50'$ ,  $112^{\circ} 52'$ .

PÁTZCUARO, MICHOACÁN, MÉXICO. Town on the hills south of Lago de Pátzcuaro in central Michoacán; 7180 feet;  $19^{\circ} 31'$ ,  $101^{\circ} 36'$ .

PAYA, DARIÉN, PANAMÁ. Settlement on the river of the same name in the southeastern corner of the province about 5 km. west of the Colombian border;  $7^{\circ} 52'$ ,  $77^{\circ} 22'$ .

PEARL ISLANDS = Archipiélago de las Perlas, Panamá, Panamá. Islands in the Golfo de Panamá south of the city of Panamá; about  $8^{\circ} 00'$ ,  $79^{\circ} 00'$ .

PECARA, COSTA RICA. Not identified. There are railroad stations of Pocora Oeste (or Pacora) and Pocora Este (or Pacora) in the northwestern part of Limón Province, at  $10^{\circ} 11'$ ,  $83^{\circ} 36'$  and  $10^{\circ} 09'$ ,  $83^{\circ} 35'$ , respectively.

PEDREGAL, MÉXICO. This is a Bilimek locality; it is probably El Pedregal, a suburb of the city of México (*q. v.*), although there are settlements of the same name in several states.

PEÑA BLANCA, CHIRIQUÍ, PANAMÁ. Mountain in the eastern part of Chiriquí west of Cerro Viejo and about 10 km. north of Tolé; "3000 to 4000 feet"; shown on "Biología" Map 7 at about  $8^{\circ} 19'$ ,  $81^{\circ} 41'$ .

PENCAJCHÉ. See Pancajché.

PENINSULA OF CALIFORNIA. See Baja California.

PÉNJAMO, GUANAJUATO, MÉXICO. Town in the southwestern corner of Guanajuato; 3600 feet;  $20^{\circ} 26'$ ,  $101^{\circ} 44'$ .

PEÑON, DISTRITO FEDERAL, MÉXICO. Railroad station and mountain (Cerro Peñon) between the city of México and Lago de Texcoco; 7300 feet;  $19^{\circ} 24'$ ,  $99^{\circ} 04'$ .

PERALTA, CARTAGO, COSTA RICA. Village on the railroad near the border of the province 10 km. northeast of the town of Turrialba;  $1500 \pm$  feet;  $9^{\circ} 58'$ ,  $83^{\circ} 37'$ .

PERAS. See Las Peras.

PEROTE, VERACRUZ, MÉXICO. Town in central Veracruz 35 km. west of Jalapa;  $8000 \pm$  feet;  $19^{\circ} 34'$ ,  $97^{\circ} 15'$ .

PETÉN = El Petén, Guatemala. Large northern department.

PICO DE ORIZABA = Volcán Citlaltépetl, Veracruz and Puebla, México. Second highest mountain peak in North America, on the border of Veracruz and

- Puebla northwest of the city of Orizaba, Veracruz; summit at 18,696 feet; 19° 01', 97° 16'.
- PIEDRAS NEGRAS, ALAJUELA AND SAN JOSÉ, COSTA RICA. Settlement on the border of Alajuela and San José provinces about midway between the city of San José and the Pacific coast; 9° 54', 84° 17'.
- PINAL, PUEBLA, MÉXICO. Railroad station 45 km. east of the city of Puebla; 8000± feet; 19° 07', 97° 48'.
- PIÑOS ALTOS, CHIHUAHUA, MÉXICO. Mining town in extreme western Chihuahua 238 km. west of the city of Chihuahua and 322 km. south of Nuevo Casas Grandes; 7900 feet; approximately 18° 15', 108° 15'.
- PIRRÍS = Río Pirrís, San José, Costa Rica. River flowing southward into the Pacific Ocean at Parrita; 9° 29', 84° 19'.
- PITAL DEL NARANJO, COSTA RICA. Not located. This locality may be the Pozo Pital described by Carriker (1910, pp. 347, 350) as on the Río Naranjo on the Pacific coast of San José Province, at approximately 9° 20', 84° 07'.
- PLAIN OF SALAMÁ. See Salamá.
- PLAINS OF SANTA CLARA. See Santa Clara Valley.
- PLAN DE BARRANCAS, JALISCO, MÉXICO. Village in northwestern Jalisco 20 km. east of Ixtlán del Río, Nayarit; 4000± feet; 21° 02', 104° 11'.
- PLAN DEL RÍO, VERACRUZ, MÉXICO. Settlement shown on "Biología" Map 5 at a position about 28 km. southeast of Jalapa and 8 km. northwest of Rinconada; 1040 feet; approximately 19° 24', 96° 36'.
- PLAN DE TARETÁN. See Taretán.
- PLAN DE URECHO = Uricho, Michoacán, México. Village on the west shore of Lago de Pátzcuaro; 6000± feet; 19° 34', 101° 42'.
- PLAYA VICENTE, VERACRUZ, MÉXICO. Village on the Río Playa Vicente in southern Veracruz near the border of Oaxaca; 1000± feet; 17° 50', 95° 49'.
- POCTÚM. See Pochtún.
- POCTÚN = Poptún, El Petén, Guatemala. Village in the southeastern part of El Petén about 24 km. west of the border of British Honduras; 16° 22', 89° 25'.
- POLOCHIC VALLEY. See Río Polochic.
- POLVÓN = El Polvón, Chinandega, Nicaragua. Settlement about 15 km. west of the town of León and about midway between León and the Pacific coast; 12° 27', 87° 05'.
- POPOCATÉPETL, MÉXICO AND PUEBLA, MÉXICO. Volcanic mountain on the border of México and Puebla southeast of the city of México; summit at 17,888 feet; 19° 02', 98° 38'.
- PORTESUELO, EL SALVADOR. Not located. There is a Río Suelo at 13° 51', 89° 02'.
- PORT LIMÓN. See Puerto Limón.
- PORTO BELLO = Portobello or Portobelo, Colón, Panamá. Atlantic port about 30 km. northeast of the city of Colón; 9° 33', 79° 39'.
- POTRERO, MÉXICO. Not identified. This is a very common place name in México.
- POZO AZUL DE PIRRÍS, SAN JOSÉ, COSTA RICA. Carriker (1910, p. 349) says that "Pozo Azul (de Pirris; sometimes referred to as Pirris)" is a locality in the forest on the Río Grande de Pirrís, southwest of Sabanilla and about 16 km. from the Pacific coast; approximately 9° 35', 84° 20'.
- PRESIDIO, DURANGO, MÉXICO. Settlement near the border of Chihuahua 35 km. southeast of Santa Bárbara, Chihuahua; 6000± feet; 26° 32', 105° 41'.
- PRESIDIO, VERACRUZ, MÉXICO. Railroad station 26 km. southeast of Córdoba;

1000± feet; 18° 41', 96° 45'.

PRESIDIO DE (OR NEAR) MAZATLÁN, SINALOA, MÉXICO. A Forrer locality presumably referring either to the Río Presidio or to a village on the river. The railroad crosses the Río Presidio a few kilometers east of Mazatlán, at 23° 10', 106° 14'. In two places in the "Biología" Durango is given as the state, in error.

PRESIDIO (Forrer). See Presidio de Mazatlán.

PROGRESO, YUCATÁN, MÉXICO. Seaport north of Mérida; 21° 17', 89° 40'.

PUEBLA, PUEBLA, MÉXICO. Capital of the state of Puebla; 7052 feet; 19° 03', 98° 12'.

PUEBLA CITY. See Puebla.

PUEBLO VIEJO = Villa Cuauhtémoc, Veracruz, México. Coastal village just south of Tampico; 22° 11', 97° 50'.

PUNTE DE IXTLA, MORELOS, MÉXICO. Village in southwestern Morelos between Cuernavaca, Morelos, and Iguala, Guerrero; 3000± feet; 18° 37', 99° 20'.

The locality is sometimes cited erroneously in the "Biología" as in Guerrero.

PUENTE NACIONAL, VERACRUZ, MÉXICO. Village 38 km. northwest of the city of Veracruz; 19° 20', 96° 26'.

PUERTO BARRIOS, IZABAL, GUATEMALA. Atlantic port and the third most important city of Guatemala; 15° 43', 88° 37'.

PUERTO CORTÉZ = Puerto Cortés, Cortés, Honduras. Atlantic port at the extreme western end of the northern coast of the republic; 15° 48', 87° 56'.

PUERTO DE SAN FELIPE = San Felipe, Izabal, Guatemala. Settlement at the eastern end of the northern shore of Lago de Izabal; 15° 37', 89° 01'.

PUERTO DE SAN JOSÉ. See San José de Guatemala.

PUERTO LIMÓN, LIMÓN, COSTA RICA. Principal Caribbean port of the republic; 10° 00', 83° 02'.

PUNTA ARENAS. See Puntarenas.

PUNTA DE SABANA, DARIÉN, PANAMÁ. Cape opposite La Palma on the lower Río Sabana, Golfo de San Miguel; about 8° 27', 78° 05'.

PUNTA DI SABANA. See Punta de Sabana.

PUNTA MALA, LOS SANTOS, PANAMÁ. Cape in the Golfo de Panamá in the southeastern corner of Los Santos; 7° 28', 80° 00'.

PUNTARENAS, PUNTARENAS, COSTA RICA. Pacific port on the Golfo de Nicoya; 9° 58', 84° 50'.

PURISCAL = Santiago, San José, Costa Rica. Town on the highway 41 km. southwest of San José; 4000± feet; 9° 51', 84° 18'.

PURULÁ = Purulhá, Baja Verapaz, Guatemala. Town in the mountains near the northern boundary of Baja Verapaz about 19 km. northeast of Salamá; 4500± feet; 15° 16', 90° 13'.

PUTLA, CÔTE DU (OR SUR LE) PACIFIQUE, MÉXICO. Not located. This name may refer to the village of Putla (de Guerrero), which is on the Pacific slope in western Oaxaca near the border of Guerrero 129 km. west of the city of Oaxaca; 4000 feet; 17° 02', 97° 56'.

PUTLA, PUEBLA, MÉXICO. Not identified. This is a McLachlan locality referring either to the village of Putla (= Puctla; 4000± feet; 18° 34', 98° 28') 32 km. south of Acatlán or that of Putla (= Patla; 1500± feet; 20° 15', 97° 51') 19 km. northeast of Huauchinango.

QUEBRADO DE JAVA = Quebrada de Java, Puntarenas, Costa Rica. Stream and ravine near Cañas Gordas and the border of Panamá; 8° 52', 83° 01'.

QUEBRADO DEL CANGREJAL. See Aserri.

QUECHOLAC, PUEBLA, MÉXICO. Village 13 km. east of Acatzingo; 8000± feet; 18° 57', 97° 40'.

QUERÉTARO, QUERÉTARO, MÉXICO. Capital of the state of Querétaro; 6160 feet; 20° 36', 100° 24'.

QUERETARO CITY. See Querétaro.

QUEZALTENANGO, QUEZALTENANGO, GUATEMALA. Head of the department and the second largest city of the republic, in the western mountains; 7657 feet; 14° 49', 91° 31'.

QUICHÉ MOUNTAINS, EL QUICHÉ, GUATEMALA. Probably the highlands around Santa Cruz del Quiché; approximately 15° 00', 91° 10'.

QUIRIGUÁ, IZABAL, GUATEMALA. Important site of Mayan ruins and village on the Atlantic slope a few kilometers from the railroad station of Los Amates, south of Lago de Izabal; 15° 22', 89° 06'.

QUIROGA, MICHOACÁN, MÉXICO. Village on the eastern shore of Lago de Pátzcuaro; 6000 ± feet; 19° 40', 101° 32'.

RANCHO ALVAREZ, SAN LUIS POTOSÍ, MÉXICO. There is a railroad station and settlement of Alvarez about 35 km. southeast of the city of San Luis Potosí; 6000± feet; 22° 02', 100° 37'. Rancho Alvarez probably refers to the settlement.

RANCHO CARBONEL, TABASCO, MÉXICO. Ranch near Frontera (*q. v.*).

RANCHO DE LA PARADA. See La Parada.

REAL DEL MONTE. See Mineral del Monte.

REALEJO = El Realejo, Chinandega, Nicaragua. Town on the Pacific coast southwest of Chinandega; 12° 32', 87° 10'.

REFUGIO, DURANGO, MÉXICO. Not identified. There are nine settlements of Refugio in Durango.

RETALHULEU, RETALHULEU, GUATEMALA. Town on the Pacific slope 18 km. west of Mazatenango; 950 feet; 14° 31', 91° 40'.

REVENTAZÓN = Río Reventazón, Cartago and Limón, Costa Rica. One of the largest rivers of Costa Rica, flowing northward from near Cartago and emptying into the Caribbean Sea about 45 km. north of Puerto Limón; 10° 17', 83° 24'.

RINCÓN, GUERRERO, MÉXICO. Settlement shown on "Biología" Map 5 at a point roughly 16 km. south of Chilpancingo; 2800 feet; approximately 17° 23', 99° 30'.

RINCONADA, PUEBLA, MÉXICO. Railroad station about 40 km. east-northeast of the city of Puebla; 8000± feet; 19° 06', 97° 40'. This locality is specified at least once in the "Biología." When the state is not cited, there is always a possibility that the locality referred to is the settlement of Rinconada, Veracruz, 35 km. southeast of Jalapa (1000± feet; 19° 21', 96° 31').

RINCONADO. See Rinconada.

RINCÓN ANTONIO, OAXACA, MÉXICO. Railroad station at the town of Matias Romero on the Istmo de Tehuantepec; 650 feet; 16° 53', 95° 03'.

RÍO ACOYAPO. See Acoyapo.

RÍO ATOYAC, MÉXICO. Not identified. This name is applied to three rivers in México: one (= Río Cotaxtla) in central Veracruz, another in southern Oaxaca, and another in western Puebla.

RÍO BALSAS, MÉXICO. Major river in southern México, emptying into the Pacific Ocean on the border of Michoacán and Guerrero at 17° 55', 102° 10'.



- RÍO BLANCO, GUERRERO, MÉXICO. Settlement 14 km. south of Chilpancingo; 4000± feet; 17° 26', 99° 28'.
- RÍO BLANCO, MÉXICO. Not identified. There are several settlements and rivers of this name in México.
- RÍO CANDELARIA, VERAGUAS, PANAMÁ. One of the rivers on the Atlantic slope flowing into the Golfo de los Mosquitos; approximately 8° 35', 81° 10'.
- RÍO CHAGRES, CANAL ZONE, PANAMÁ. River flowing northwestward from Gatún to the Caribbean Sea; approximately 9° 17', 80° 00'.
- RÍO CHISOY. See RÍO Chixoy.
- RÍO CHIXOY = RÍO Negro, Guatemala. Large river in northern central Guatemala flowing from about 91° 30' eastward to about 90° 30' and then turning northward to flow along the border of Chiapas, México (as the RÍO Salinas and RÍO Usumacinta); joins border of Chiapas at 16° 04', 9° 26'.
- RÍO CIANATI, DARIÉN, PANAMÁ. Small river west of Punta de Sabana and flowing southward into the Golfo de San Miguel; approximately 8° 30', 78° 10'. (See Festa, 1909, p. 48.)
- RÍO COCULA, GUERRERO, MÉXICO. Minor tributary of the RÍO Balsas arising northwest of Iguala and entering the RÍO Balsas at Balsas. The railroad station of Cocula, on the river, is at 2000 feet; 18° 20', 99° 39'.
- RÍO DE LAS BALSAS. See RÍO Balsas.
- RÍO DEL CONVENTO = RÍO Convento, Puntarenas, Costa Rica. One of a number of rivers draining southward from the Cordillera de Talamanca in the extreme northern part of Puntarenas south of the province of San José; 9° 13', 83° 29'.
- RÍO DEL MONTE, MÉXICO. This is probably an error for Real del Monte (*q. v.*).
- RÍO DULCE, IZABAL, GUATEMALA. Outlet of Lago de Izabal; approximately 15° 45', 88° 45'.
- RÍO ESCONDIDO, ZELAYA [formerly Bluefields], NICARAGUA. Large river in the southeast emptying into the Atlantic Ocean at the town of Bluefields; 12° 09', 83° 46'.
- RÍO FRÍO IXTACCHUATL = RÍO Frío, México, México. Village on the border of Puebla 16 km. north of the volcano Ixtaccchuatl; 8000± feet; 19° 21', 98° 40'.
- RÍO GATUN, COLÓN, PANAMÁ. River rising 20 to 30 km. east of Colón and flowing southwestward into Gatún Lake; about 9° 00', 79° 50'.
- RÍO GRANDE = RÍO Grande de Tarcoles, San José and Puntarenas, Costa Rica. Large river rising in the valley of San José and flowing westward along the border of San José and Alajuela into the Golfo de Nicoya; 9° 47', 84° 38'.
- RÍO GRIJALVA, MÉXICO. Major river rising in Guatemala, flowing through Chiapas, and emptying into the Atlantic Ocean at 18° 36', 92° 39', near Álvaro Obregón.
- R[ÍO] OR RÍO HONDO, COROZAL, BRITISH HONDURAS. River flowing along the frontier of México and British Honduras and emptying into the Bahía de Chetumal; 18° 29', 88° 19'.
- RÍO JESÚS MARÍA, ALAJUELA AND PUNTARENAS, COSTA RICA. River on the border of Alajuela and Puntarenas flowing southwestward into the Golfo de Nicoya; 9° 51', 84° 41'.
- RÍO LARA, DARIÉN, PANAMÁ. Small river at the head of the long inlet north of La Palma in the Golfo de San Miguel; approximately 8° 40', 78° 00'.
- RÍO MACHUCA, ALAJUELA, COSTA RICA. Small river flowing westward into the Golfo de Nicoya southeast of Puntarenas; 9° 53', 84° 39'.

RÍO MARÍA LINDA, ESCUINTLA, GUATEMALA. River flowing into the Pacific Ocean about 11 km. east of the port of San José; approximately  $14^{\circ} 30'$ ,  $90^{\circ} 30'$ .

RÍO MESCALES. See Río Balsas.

RÍO MEZCALA. See Río Balsas.

RÍO MOTAGUA, GUATEMALA. Important river flowing eastward from the central highlands into the Golfo de Honduras; mouth at  $15^{\circ} 44'$ ,  $88^{\circ} 14'$ .

RÍO NARANJO, SAN MARCOS, GUATEMALA. Lower reaches of the river (at about the locality now called Pajapita) flowing from the mountains of San Marcos southward and southwestward and emptying into the Pacific Ocean near the border of México at  $14^{\circ} 30'$ ,  $92^{\circ} 10'$ .

RÍO NAUTLA, VERACRUZ, MÉXICO. River in central Veracruz rising near Tezuitlán, Puebla, and emptying into the Atlantic Ocean at Nautla;  $20^{\circ} 15'$ ,  $96^{\circ} 47'$ .

RÍO PAPAGAYO. See Río Papagayo.

RÍO PAPAGAYO, GUERRERO, MÉXICO. River in southern Guerrero emptying into the Pacific Ocean at  $16^{\circ} 46'$ ,  $99^{\circ} 43'$ , east of Acapulco.

RÍO PAPALOAPAN, VERACRUZ, MÉXICO. River in southern Veracruz emptying into the Atlantic Ocean at  $18^{\circ} 42'$ ,  $95^{\circ} 38'$ , near Alvarado.

RÍO PIEDRAS VERDES = Río de Piedras Verdes, Chihuahua, México. Stream in northwestern Chihuahua about 25 km. south of Nuevo Casas Grandes; 7000± feet;  $30^{\circ} 15'$ ,  $108^{\circ} 00'$ .

RÍO POLOCHIC, ALTA VERAPAZ, GUATEMALA. River flowing from south of Cobán into the western end of Lago de Izabal at  $15^{\circ} 28'$ ,  $89^{\circ} 23'$ .

R[ÍO] ROMAN ON THE MOSQUITO COAST, ZELAYA, NICARAGUA. Not located. This is perhaps the Río Rama (called Río Punta Gorda on some maps), which flows eastward into the Caribbean Sea at Punta Gorda on the southern coast ( $11^{\circ} 30'$ ,  $83^{\circ} 47'$ ); or it may be the Río Rama near the village of Rama ( $12^{\circ} 09'$ ,  $84^{\circ} 15'$ ), about 60 km. west of Bluefields.

R[ÍO] OR RÍO SARSTOON. See Sarstoon River.

RÍO SUCIO, SAN JOSÉ, COSTA RICA. River draining northward from Volcán de Irazú, at approximately  $10^{\circ} 32'$ ,  $84^{\circ} 00'$ .

RÍO TIPETAPE = Río Tipitapa, Managua, Nicaragua. River connecting the lakes of Managua and Nicaragua;  $12^{\circ} 12'$ ,  $86^{\circ} 07'$ .

RÍO VERDE, SAN LUIS POTOSÍ, MÉXICO. Town 105 km. east-southeast of the city of San Luis Potosí; 3200 feet;  $21^{\circ} 56'$ ,  $99^{\circ} 59'$ . (See Hooper, 1952, p. 240.)

RODEO = El Rodeo, San José, Costa Rica. This name appears in the "Biología" in the locality "between Mata de Leña and Rodeo, Pacific slope." There are two settlements called El Rodeo in the province; the one meant is probably the southern one about 18 km. from the Pacific coast, at  $9^{\circ} 32'$ ,  $84^{\circ} 07'$ . Mata de Leña was not located.

ROSARIO DE DESAMPARADOS = Rosario and Desamparados, San José, Costa Rica. These are two settlements about 6 km. apart. Rosario is at  $9^{\circ} 48'$ ,  $84^{\circ} 05'$ ; Desamparados is to the north at  $9^{\circ} 54'$ ,  $84^{\circ} 04'$ , or about 8 km. south of San José.

RUATAN ISLAND = Isla de Roatán, Islas de la Bahía, Honduras. Large island about 48 km. off the northern coast of Honduras; 900± feet;  $16^{\circ} 23'$ ,  $86^{\circ} 30'$ . The locality cited in Lepidoptera Rhopalocera (vol. 2) of the "Biología" under México is in error.

SÁBALOS RIVER. See Los Sábalo River.

SABANILLA, SAN JOSÉ, COSTA RICA. Settlement in northwestern San José midway

between the city of San José and the Pacific coast in a southwesterly direction; 9° 44', 84° 16'.

SABINAS, NUEVO LEÓN, MÉXICO. Town on the railroad in northeastern Coahuila near Nueva Rosita; 1120 feet; 27° 51', 101° 07'.

SABO = Sabob, Baja Verapaz, Guatemala. Coffee plantation in the northeastern corner of Baja Verapaz about 6 km. east of Purulhá; 2900 feet; 15° 15', 90° 09'.

SACATEPEC, MÉXICO. Not identified. There are several settlements of the name Zacatepec in México.

SACRAMONTE, MORELOS, MÉXICO. Not located. The locality is cited in the "Biología" as "Sacramonte near Amecameca [state of México] in Morelos."

SALAMÁ, BAJA VERAPAZ, GUATEMALA. Largest town in Baja Verapaz; 3000± feet; 15° 00', 90° 00'.

SALAZAR, MÉXICO, MÉXICO. Railroad station 28 km. east of Toluca; 10,000 feet; 19° 18', 99° 23'.

SALINA CRUZ, OAXACA, MÉXICO. Pacific port on the Golfo de Tehuantepec south of the city of Tehuantepec; 16° 10', 95° 12'.

SALTILLO, COAHUILA, MÉXICO. Capital of the state of Coahuila; 5145 feet; 25° 03', 102° 37'.

SAN AGUSTÍN, SUCHITEPÉQUEZ, GUATEMALA. Settlement on the southern slope of the Volcán de Atitlán about 8 km. north of Patulul and due east of Mazatenango; 2250 feet; shown on "Biología" Map 8 at about 14° 30', 91° 06'.

SAN ANDRÉS. See San Andrés Tuxtla.

SAN ANDRÉS CHALCHICOMULA = Ciudad Serdán, Puebla, México. Town near the western base of the Pico de Orizaba 40 km. northwest of the city of Orizaba, Veracruz; 8382 feet; 18° 59', 97° 27'.

SAN ANDRÉS TUXTLA, VERACRUZ, MÉXICO. Town near the coast in southern Veracruz; 900 feet; 18° 27', 95° 13'.

SAN ÁNGEL = Villa Obregón, Distrito Federal, México. Southern suburb of the city of México; 7400 feet; 19° 21', 99° 12'.

SAN ANTONIO DE ARRIBA, MÉXICO. Not located.

SAN ANTONIO DEL SAPOTAL, TABASCO, MÉXICO. Not located. There are at least two settlements of San Antonio in Tabasco, in addition to a settlement of Zapotal (61 km. west-northwest of Villahermosa; 18° 05', 93° 30').

SANARATE, EL PROGRESO, GUATEMALA. Town on the railroad in the highlands northeast of the city of Guatemala 14 km. southwest of El Progreso; 2500± feet; 14° 47', 90° 12'.

SAN BARTOLO, MÉXICO. Not identified. This is a common locality name in México.

SAN BERNARDO, GUATEMALA, GUATEMALA. Settlement just within the northeastern border of the department of Guatemala about midway between the city of Guatemala and Salamá; 2000± feet; 14° 52', 90° 25'.

SAN BLAS, NAYARIT, MÉXICO. Fishing village on the Pacific coast west of Tepic; 21° 31', 105° 16'. It was formerly in Jalisco and is cited as such in several places in the "Biología."

SAN CARLOS OR COMMANDANCIA DE SAN CARLOS, ALAJUELA, COSTA RICA. This locality is said by Carriker (1910, p. 351) to be a former government station at the junction of the Río Arenal and the Río San Carlos, which would be at about 10° 32', 84° 28'. There is at present a group of houses called Muelle del Arenal at this site.

- SAN CARLOS, RÍO SAN JUAN [formerly Chontales], NICARAGUA. Settlement at the outlet of the Río San Juan in the southeastern corner of Lago de Nicaragua;  $11^{\circ} 07'$ ,  $84^{\circ} 47'$ .
- SAN DIEGO, ESCUINTLA, GUATEMALA. Settlement about 4 km. northwest of Escuintla;  $1500 \pm$  feet;  $14^{\circ} 22'$ ,  $90^{\circ} 48'$ .
- SAN DIEGO, SIERRA MADRE, CHIHUAHUA, MÉXICO. Not located.
- SAN DOMINGO. See Santo Domingo, Nicaragua.
- SAN ESTEBAN, BAJA CALIFORNIA SUR, MÉXICO. Water wells northwest of San Ignacio;  $1000 \pm$  feet;  $27^{\circ} 45'$ ,  $113^{\circ} 25'$ .
- SAN FELIPE, RETALHULEU, GUATEMALA. Town on the highway about 15 km. northeast of Retalhuleu on the Pacific slope;  $14^{\circ} 37'$ ,  $91^{\circ} 36'$ .
- SAN FELIPE SABINAS = San Felipe, Coahuila, México. Settlement in northeastern Coahuila 18 km. southeast of Sabinas; 1200 feet;  $27^{\circ} 44'$ ,  $100^{\circ} 59'$ .
- SAN FELIZ = San Félix, Chiriquí, Panamá. Village in the Pacific lowlands at the eastern end of Chiriquí about 13 km. northwest of El Nancito; 650 feet;  $8^{\circ} 17'$ ,  $81^{\circ} 53'$ .
- SAN FERNANDO = Misión San Fernando, Baja California Norte, México. Mission ruins in the central part of the state; 1600 feet;  $29^{\circ} 59'$ ,  $115^{\circ} 17'$ .
- SAN FRANCISCO, HEREDIA OR SAN JOSÉ, COSTA RICA. Not identified. In the vicinity of the cities of San José (*q. v.*) and Heredia, which are only 10 km. apart, there are four or five localities to which this name might apply.
- SAN FRANCISCO, VERACRUZ, MÉXICO. There are several settlements of this name in Veracruz, but the one referred to in the "Biología" is probably the railroad station on the line to Jalapa 30 km. northwest of the city of Veracruz;  $19^{\circ} 22'$ ,  $96^{\circ} 23'$ .
- SAN FRANCISCO DE GUADALUPE, COSTA RICA. See San Francisco, Costa Rica.
- SAN FRANCISCO DE GUADALUPE, MÉXICO. Not located.
- SAN GABRIEL, SAN JOSÉ, COSTA RICA. Settlement just northeast of the city of San José;  $4000 \pm$  feet;  $9^{\circ} 57'$ ,  $84^{\circ} 04'$ .
- SAN GERÓNIMO = San Jerónimo, Baja Verapaz, Guatemala. Town in the highlands about 10 km. southeast of Salamá;  $15^{\circ} 08'$ ,  $90^{\circ} 11'$ . This locality is listed erroneously at least once in the "Biología" for México.
- SAN IGNACIO, BAJA CALIFORNIA SUR, MÉXICO. Small town in the northern part of the territory about 68 km. west of Santa Rosalía;  $27^{\circ} 27'$ ,  $112^{\circ} 51'$ .
- SAN ISIDRO, COAHUILA, MÉXICO. Settlement in southern Coahuila 29 km. west-northwest of Parras;  $4500 \pm$  feet;  $25^{\circ} 33'$ ,  $102^{\circ} 26'$ .
- SAN ISIDRO, SAN JOSÉ, COSTA RICA. According to Carriker (1910, p. 351), this is probably the San Isidro 7 km. northeast of the city of San José, on the slopes of the Volcán de Irazú; 5200 feet;  $9^{\circ} 59'$ ,  $84^{\circ} 00'$ .
- SAN ISIDRO, SUCHITEPÉQUEZ, GUATEMALA. Settlement shown on "Biología" Map 8 on the Pacific slope about 7 km. south of Mazatenango; 1600 feet;  $14^{\circ} 28'$ ,  $91^{\circ} 28'$ .
- SAN JOACHIN. See San Joaquín.
- SAN JOAQUÍN, ALTA VERAPAZ, GUATEMALA. Settlement near the southern border of Alta Verapaz 15 km. southwest of Cobán;  $3200 \pm$  feet;  $15^{\circ} 22'$ ,  $90^{\circ} 24'$ .
- SAN JORGE, BAJA CALIFORNIA SUR, MÉXICO. Fishing village on the west coast 10 km. west of Pozo Grande and 32 km. northwest of Santo Domingo;  $25^{\circ} 44'$ ,  $112^{\circ} 04'$ .
- SAN JOSÉ, SAN JOSÉ, COSTA RICA. Capital and largest city, situated in a valley

surrounded by high mountains; 3716 feet;  $9^{\circ} 56'$ ,  $84^{\circ} 05'$ .

SAN JOSÉ DE GRACIA, BAJA CALIFORNIA SUR, MÉXICO. Large ranch in the northern part of the territory about 80 km. northwest of La Purísima;  $26^{\circ} 34'$ ,  $112^{\circ} 45'$ .

SAN JOSÉ DE GUATEMALA = San José, Escuintla, Guatemala. Important port on the Pacific coast;  $13^{\circ} 55'$ ,  $90^{\circ} 49'$ .

SAN JOSÉ DE GUAYMAS, SONORA, MÉXICO. Settlement on the coast just north of Guaymas;  $27^{\circ} 59'$ ,  $110^{\circ} 54'$ .

SAN JOSÉ DEL CABO, BAJA CALIFORNIA SUR, MÉXICO. Coastal town at the southern end of the peninsula of Baja California;  $23^{\circ} 03'$ ,  $109^{\circ} 41'$ .

SAN JOSÉ ISLAND = Isla San José, Panamá, Panamá. Southwesternmost island in the Archipiélago de las Perlas in the Golfo de Panamá;  $8^{\circ} 15'$ ,  $79^{\circ} 07'$ .

SAN JOSÉ PASS, MÉXICO. Not located. This locality is perhaps the settlement of Paso de San José in northwestern Guerrero 24 km. northeast of Coyuca;  $1000 \pm$  feet;  $18^{\circ} 29'$ ,  $100^{\circ} 34'$ .

SAN JUAN, ALTA VERAPAZ, GUATEMALA. Small coffee plantation on the mountain slopes a few kilometers south of Senahú and north of the valley of the Río Polochic; 1800 feet;  $15^{\circ} 24'$ ,  $89^{\circ} 55'$ .

SAN JUAN, MASAYA OR BOACO, NICARAGUA. Not identified. There are two small villages named San Juan, one on the lake southeast of Masaya itself, at  $11^{\circ} 54'$ ,  $86^{\circ} 05'$ , and the other at the northwestern end of Lago de Nicaragua on the border of Masaya and Boaco departments, at  $12^{\circ} 09'$ ,  $85^{\circ} 59'$ .

SAN JUAN, VERACRUZ, MÉXICO. Not located. This locality is possibly the same as Paso de San Juan (*q. v.*) or perhaps the same as San Juan Evangelista on the Río San Juan in southern Veracruz ( $17^{\circ} 54'$ ,  $95^{\circ} 08'$ ).

SAN JUAN BAUTISTA = Villahermosa, Tabasco, México. Capital of the state of Tabasco;  $17^{\circ} 59'$ ,  $92^{\circ} 55'$ .

SAN JUAN COSCOMATEPEC = Coscomatepec, Veracruz, México. Town in central Veracruz 26 km. north-northeast of Orizaba;  $5000 \pm$  feet;  $19^{\circ} 04'$ ,  $97^{\circ} 02'$ .

SAN JUAN DEL NORTE, RÍO SAN JUAN, NICARAGUA. Head of the department and Atlantic port in the extreme southeast of the republic;  $10^{\circ} 56'$ ,  $83^{\circ} 42'$ .

SAN JUAN DE LOS LLANOS, MÉXICO. Not identified. This name could refer either to a district in Puebla (at the narrow region between Tlaxcala and Veracruz) or to a village in western Guanajuato 40 km. northeast of León ( $8000 \pm$  feet;  $21^{\circ} 17'$ ,  $101^{\circ} 19'$ ).

SAN JUAN DEL RÍO, QUERÉTARO, MÉXICO. Town in the southern part of the state; 6500 feet;  $20^{\circ} 23'$ ,  $100^{\circ} 00'$ .

SAN JUAN DEL SUR, RIVAS, NICARAGUA. Port on the Pacific coast about 25 km. north of the border of Costa Rica;  $11^{\circ} 15'$ ,  $85^{\circ} 52'$ .

SAN JUAN OSTUNCALCO. See Ostuncalco.

SAN JUAN TUMBIO, MÉXICO. Not located.

SAN JULIO, BAJA CALIFORNIA NORTE, MÉXICO. Michelbacher and Ross (1942, pl. 1) show a San Julio on the west coast of the peninsula about 48 km. south-southwest of Catavina; approximately  $29^{\circ} 25'$ ,  $114^{\circ} 55'$ . This is an Eisen locality, but it is not shown on Eisen's (1895) maps.

SAN LÁZARO. See Sierra San Lázaro.

SAN LORENZO, CHIRIQUÍ, PANAMÁ. Settlement near the highway, about 40 km. east of David, on the Pacific slope at about the middle of the southern half of Chiriquí;  $8^{\circ} 18'$ ,  $82^{\circ} 07'$ .

- SAN LORENZO, MANAGUA OR BOACO, NICARAGUA. Not identified. There are a number of settlements of this name. One is in the southwestern part of Managua, almost on the border of the department of León ( $12^{\circ} 06'$ ,  $86^{\circ} 34'$ ). Two are in Boaco: one 12 km. south of the town of Boaco ( $12^{\circ} 20'$ ,  $85^{\circ} 40'$ ) and the other on the highway near the border of Chontales ( $12^{\circ} 09'$ ,  $85^{\circ} 32'$ ).
- SAN LORENZO, VERACRUZ, MÉXICO. Village 16 km. southeast of Córdoba;  $1500 \pm$  feet;  $18^{\circ} 50'$ ,  $96^{\circ} 47'$ .
- SAN LORENZO CÓRDOVA. See San Lorenzo, México.
- SAN LUCAS, BAJA CALIFORNIA SUR, MÉXICO. Coastal village at the southern tip of the peninsula of Baja California;  $22^{\circ} 53'$ ,  $109^{\circ} 54'$ .
- SAN LUCAS, SACATEPÉQUEZ, GUATEMALA. Town on the summit of the ridge and highway between the city of Guatemala and Antigua to the west; 8924 feet;  $14^{\circ} 37'$ ,  $90^{\circ} 40'$ .
- SAN LUCAS TOLIMÁN, SOLOLÁ, GUATEMALA. Indian town on the southeastern shore of Lago de Atitlán;  $4000 \pm$  feet;  $14^{\circ} 38'$ ,  $91^{\circ} 08'$ .
- SAN LUIS, BAJA CALIFORNIA [SUR?], MÉXICO. Not identified. This locality, given in the "Biologia" as San Luis, Lower California, is probably the village of San Luis in central Baja California Sur, near Misión San Luis Gonzaga;  $24^{\circ} 55'$ ,  $111^{\circ} 16'$ . There is, however, an additional San Luis in Baja California Sur (at  $27^{\circ} 24'$ ,  $112^{\circ} 48'$ ) and one in Baja California Norte (at  $18^{\circ} 26'$ ,  $113^{\circ} 45'$ ).
- SAN LUIS (Palmer). See San Luis Potosí.
- SAN LUIS POTOSÍ, SAN LUIS POTOSÍ, MÉXICO. Capital of the state of San Luis Potosí; 6290 feet;  $22^{\circ} 09'$ ,  $100^{\circ} 59'$ .
- SAN MARCOS, CHINANDEGA, NICARAGUA. Not identified. This is probably the village on the peninsular part of Chinandega south of the Golfo de Fonseca at  $12^{\circ} 51'$ ,  $87^{\circ} 30'$ , but there are at least three additional localities of the same name in the departments of Estelí, Masaya, and Matagalpa.
- SAN MARCOS, JALISCO, MÉXICO. This name very probably refers to the railroad terminal about 81 km. west-northwest of Guadalajara;  $3000 \pm$  feet;  $20^{\circ} 47'$ ,  $104^{\circ} 11'$ . There are two other settlements of the same name in Jalisco, but both are relatively inaccessible and do not appear on any of the maps consulted.
- SAN MARCOS, MÉXICO. Not identified.
- SAN MARTÍN "NEAR OSTUNCALCO" = San Martín Sacatepéquez, Quezaltenango, Guatemala. Settlement about 15 km. west of Quezaltenango;  $14^{\circ} 48'$ ,  $91^{\circ} 38'$ .
- SAN MARTÍN TUXTLA = Volcán San Martín, Veracruz, México. Volcanic mountain on the coast in southern Veracruz; summit at  $6000 \pm$  feet;  $18^{\circ} 33'$ ,  $95^{\circ} 12'$ .
- SAN MATEO, ALAJUELA, COSTA RICA. Town in the southwestern corner of Alajuela at the foot of the Aguacate Mountains;  $1000 \pm$  feet;  $9^{\circ} 56'$ ,  $84^{\circ} 31'$ .
- SAN MATEO DEL MAR, OAXACA, MÉXICO. Settlement 30 km. southeast of the city of Tehuantepec;  $16^{\circ} 12'$ ,  $95^{\circ} 00'$ .
- SAN MIGUEL, GUATEMALA. Not identified. There are in Guatemala at least four localities of this name and eight with another name appended to the "San Miguel"; but see Tucurú.
- SAN MIGUEL, MÉXICO. See Las Peras.
- SAN MIGUEL, PEARL ISLANDS = Isla de San Miguel or Isla del Rey, Panamá, Panamá. Largest of the islands in the Archipiélago de las Perlas, Golfo de Panamá;  $8^{\circ} 22'$ ,  $78^{\circ} 55'$ .
- SAN MIGUEL DEL RÍO, MÉXICO. Not located.

SAN MIGUELITO, MÉXICO. See Sierra de San Miguelito.

SAN MIGUELITO, RÍO SAN JUAN [formerly Chontales], NICARAGUA. Port on the southeastern shore of Lago de Nicaragua;  $11^{\circ} 23'$ ,  $84^{\circ} 54'$ .

SAN NICOLÁS, VERACRUZ, MÉXICO. Not identified. There are at least four settlements of this name in Veracruz.

SAN PEDRO, COAHUILA, MÉXICO. Important railroad town in the western part of the state; also known as San Pedro de las Colonias; 3904 feet;  $25^{\circ} 45'$ ,  $102^{\circ} 59'$ .

SAN PEDRO ET LA. See Etla.

SAN PEDRO SULA, CORTÉS, HONDURAS. City and an important center about 38 km. inland from Puerto Cortés in northwestern Honduras;  $15^{\circ} 27'$ ,  $88^{\circ} 02'$ .

SAN RAFAEL, VERACRUZ, MÉXICO. Not identified. There are at least two settlements of this name in Veracruz. One is 81 km. southwest of Tampico (at  $21^{\circ} 34'$ ,  $98^{\circ} 09'$ ), and the other is about 32 km. north of Misantla (at  $20^{\circ} 12'$ ,  $96^{\circ} 51'$ ). (See San Rafael Jicaltepec.)

SAN RAFAEL JICALTEPEC = San Rafael and Jicaltepec, Veracruz, México. San Rafael and Jicaltepec are listed by the United States Board on Geographic Names (1956) as separate villages on the Río Nautla in northern Veracruz. San Rafael is at  $20^{\circ} 12'$ ,  $96^{\circ} 51'$ ; Jicaltepec, at  $20^{\circ} 10'$ ,  $96^{\circ} 50'$ .

SAN RAYMUNDO = Arroyo San Raymundo, Baja California Sur, México. Stream on the west coast emptying into the Pacific Ocean between Punta Santo Domingo and Punta Pequeña;  $26^{\circ} 17'$ ,  $112^{\circ} 34'$ .

SAN SALVADOR, SAN SALVADOR, EL SALVADOR. National capital; 2238 feet;  $13^{\circ} 42'$ ,  $89^{\circ} 12'$ .

SANTA ANA, CHIHUAHUA, MÉXICO. Not identified. There are several settlements of this name in Chihuahua. The "Biologia" specifies Santa Ana or Santana "below" Tribo or El Tribo, but we have not located this latter locality.

SANTA ANA, LEÓN, NICARAGUA. Settlement on the northwestern shore of Lago de Managua about 8 km. northeast of Volcán de Momotombo;  $12^{\circ} 28'$ ,  $86^{\circ} 30'$ .

SANTA ANA ON THE RÍO NEGRO, ALTA VERAPAZ, GUATEMALA. Small settlement 21 km. southwest of Cobán, at the junction of the departments of Alta Verapaz, El Quiché, and Baja Verapaz;  $15^{\circ} 18'$ ,  $90^{\circ} 25'$ .

SANTA BÁRBARA, BAJA VERAPAZ, GUATEMALA. Settlement in the mountains southwest of Chilascó and 18 km. southeast of Salamá;  $15^{\circ} 04'$ ,  $90^{\circ} 07'$ .

SANTA BÁRBARA, JALISCO, MÉXICO. Not identified. There are two settlements of this name in Jalisco, both in the eastern part of the state. One is near Teocaltiche; the other is north of Tepatlán.

SANTA CLARA, CHIHUAHUA, MÉXICO. Not identified. There are two villages of this name in Chihuahua, one 121 km. northwest of the city of Chihuahua ( $6000 \pm$  feet;  $29^{\circ} 18'$ ,  $107^{\circ} 02'$ ) and the other 64 km. east of the city ( $4000 \pm$  feet;  $28^{\circ} 44'$ ,  $105^{\circ} 26'$ ).

SANTA CLARA, LIMÓN OR HEREDIA, COSTA RICA. Not identified. There are two small settlements of this name, one in northwestern Limón near the terminus of the railroad ( $10^{\circ} 12'$ ,  $83^{\circ} 46'$ ) and the other nearby, about 12 km. west across the border in Heredia ( $10^{\circ} 12'$ ,  $83^{\circ} 54'$ ).

SANTA CLARA VALLEY = Llanos de Santa Clara, Heredia and Limón, Costa Rica. Caribbean lowland plain north and east of the Cordillera Central;  $10^{\circ} 20'$ ,  $83^{\circ} 37'$ .

SANTACOMAPAN. See Sontecomapan.

SANTA CRUZ, MÉXICO. Not identified.

SANTA CRUZ "NEAR SAN GERÓNIMO," BAJA VERAPAZ, GUATEMALA. Settlement in the southeastern part of Baja Verapaz about 12 km. northeast of San Jerónimo;  $15^{\circ} 06'$ ,  $90^{\circ} 04'$ .

SANTA FÉ, DISTRITO FEDERAL, MÉXICO. Southwestern suburb of the city of México (*q. v.*).

SANTA FÉ, VERAGUAS, PANAMÁ. Small village in the mountains about 25 km. northeast of San Francisco;  $1500 \pm$  feet;  $8^{\circ} 27'$ ,  $80^{\circ} 52'$ .

SANTA LUCÍA, ESCUINTLA, GUATEMALA. Town on the highway about 28 km. west of Escuintla, in the Pacific lowlands;  $14^{\circ} 20'$ ,  $91^{\circ} 02'$ .

SANTA LUCRECIA = Jesús Carranza, Veracruz, México. Railroad station on the Istmo de Tehuantepec 58 km. south of Acayucan; 850 feet;  $17^{\circ} 26'$ ,  $95^{\circ} 02'$ .

SANTA MARÍA, ESCUINTLA, GUATEMALA. Town on the railroad about 8 km. south of Escuintla;  $14^{\circ} 12'$ ,  $90^{\circ} 51'$ . The locality is cited in the "Biología" as "Santa María in Escuintla."

SANTA MARÍA, PUEBLA, MÉXICO. Not identified. There are a number of settlements of this name in Puebla.

SANTA MARÍA DE DOTA = Santa María, San José, Costa Rica. Town in the Dota Mountains near the border of San José and Cartago provinces about 30 km. south of Cartago;  $6000 \pm$  feet;  $9^{\circ} 39'$ ,  $83^{\circ} 57'$ .

SANTANA. See Santa Ana, Mexico.

SANTA ROSA, BAJA VERAPAZ, GUATEMALA. Settlement on the highway 14 km. north of Salamá;  $4000 \pm$  feet;  $15^{\circ} 16'$ ,  $90^{\circ} 14'$ .

SANTA ROSA, VERACRUZ, MÉXICO. Railroad station in southern Veracruz 40 km. southwest of Acayucan;  $17^{\circ} 38'$ ,  $95^{\circ} 09'$ .

SANTA ROSA RIVER NEAR PORTO BELLO, COLÓN, PANAMÁ. Not located. This is probably a very small river. Busck, the collector, is said to have gone from Porto Bello "up the coast to the Santa Rosa River" (Smithsonian Institution, 1913, p. 69). (See also Porto Bello.)

SANTECOMAPAN. See Sontecomapan.

SANTIAGO. See Santiago Ixcuintla.

SANTIAGO ISCUINTLA. See Santiago Ixcuintla.

SANTIAGO ISCUINTLA, NAYARIT, MÉXICO. Town on the Río Grande de Santiago between Tuxpan and Tepic;  $21^{\circ} 49'$ ,  $105^{\circ} 13'$ . The locality was formerly in Jalisco and is cited as such in several places in the "Biología."

SANTO DOMINGO, CHONTALES, NICARAGUA. Town in the northern part of Chontales about 19 km. east of La Libertad; 2851 feet;  $12^{\circ} 16'$ ,  $84^{\circ} 59'$ .

SANTO DOMINGO = Tehuantepec, Oaxaca, México. City in southeastern Oaxaca at the southern end of the Istmo de Tehuantepec;  $16^{\circ} 20'$ ,  $95^{\circ} 14'$ .

SAN TOMÁS. See Santo Tomás.

SANTO TOMÁS, IZABAL, GUATEMALA. Village and Caribbean port about 5 km. south of Puerto Barrios;  $15^{\circ} 40'$ ,  $88^{\circ} 37'$ .

SARAPIQUÍ, HEREDIA, COSTA RICA. Village in the northern central part of Heredia on the river of the same name;  $4000 \pm$  feet;  $10^{\circ} 29'$ ,  $84^{\circ} 01'$ .

SARBACA. See Tarbaca.

SARSTOON RIVER, TOLEDO, BRITISH HONDURAS. River and frontier of southern British Honduras and northeastern Guatemala (Izabal Department);  $15^{\circ} 54'$ ,  $88^{\circ} 54'$ .



SAVANA GRANDE = Sabana Grande, Guerrero, México. Settlement 21 km. south of Iguala; 3000 feet;  $18^{\circ} 09'$ ,  $99^{\circ} 33'$ .

SAVANILLAS DE PIRRI. See Sabanilla.

SAYULA, JALISCO, MÉXICO. Town in the southern part of the state 24 km. northwest of Ciudad Guzmán;  $4000 \pm$  feet;  $19^{\circ} 52'$ ,  $103^{\circ} 37'$ .

SAYUPA, DURANGO, MÉXICO. Not located. The locality is described in the "Biologia" (Neuroptera, p. x) as on the border of Sinaloa.

SECANQUIM. See Secanquin.

SECANQUIN = Seganguim, Alta Verapaz, Guatemala. Small finca shown in Sapper (1901) at about 12 km. northeast of Senahú; 1869 feet; approximately  $15^{\circ} 30'$ ,  $89^{\circ} 52'$ .

SECTION 5, 11, 13, FERRO CARRIL DEL NORTE, IZABAL, GUATEMALA. Sections along the railroad on the Atlantic slope between Puerto Barrios and the city of Guatemala.

SENAHÚ, ALTA VERAPAZ, GUATEMALA. Town in the mountains north of the valley of the Río Polochic about 18 km. west of Panzós; 3850 feet;  $15^{\circ} 26'$ ,  $89^{\circ} 54'$ .

SENAHU. See Senahú.

SEPACUITÉ, ALTA VERAPAZ, GUATEMALA. Hacienda or finca in the mountains about 9 km. northeast of Senahú;  $15^{\circ} 29'$ ,  $89^{\circ} 52'$ .

SIERRA (? DE AGUA), MÉXICO. Not located.

SIERRA DE AJUSCO, DISTRITO FEDERAL, MÉXICO. Mountain range along the southern border of the Valle de México. Its principal peak, Cerro de Ajusco, has its summit at 12,665 feet;  $19^{\circ} 12'$ ,  $99^{\circ} 15'$ .

SIERRA DE DURANGO. See Sierra Madre Occidental. Note, however, that according to Champion (Coleoptera, vol. 4, pt. 4, p. 210), specimens with this label obtained from Donckier are probably from Veracruz or Oaxaca rather than Durango.

SIERRA DE LAS AGUAS ESCONDIDAS, GUERRERO, MÉXICO. Mountain range 19 km. southwest of Chilpancingo; 7000 feet;  $17^{\circ} 28'$ ,  $99^{\circ} 38'$ .

SIERRA DE MAZAMITL. See Mazamitla.

SIERRA DE NAYARIT. See Sierra Madre Occidental.

SIERRA DE SAN LÁZARO. See Sierra San Lázaro.

SIERRA DE SAN MIGUELITO, SAN LUIS POTOSÍ, MÉXICO. Small range of mountains in extreme southern San Luis Potosí about 13 km. south of the capital city;  $22^{\circ} 02'$ ,  $101^{\circ} 00'$ . Palmer is given as the collector of material from the Sierra. The Hacienda de San Miguelito, another Palmer locality, was probably a ranch in the Sierra.

SIERRA DE TEPIC. See Sierra Madre Occidental.

SIERRA DE ZONGOLICA. See Zongolica.

SIERRA EL TASTE = El Taste, Baja California Sur, México. Mountain in the cape region about 8 km. southeast of San Bartolo;  $23^{\circ} 42'$ ,  $109^{\circ} 49'$ .

SIERRA LAGUNA, BAJA CALIFORNIA SUR, MÉXICO. Mountains surrounding the valley of La Laguna east of Todos Santos;  $23^{\circ} 30'$ ,  $110^{\circ} 00'$ .

SIERRA MADRE, MÉXICO. As used in the Neuroptera volume of the "Biologia," this name refers to the Sierra Madre Occidental (*q. v.*).

SIERRA MADRE, NAYARIT. See Sierra Madre Occidental.

SIERRA MADRE DE CHIHUAHUA. See Sierra Madre Occidental.

SIERRA MADRE DE (OR IN) DURANGO. See Sierra Madre Occidental.

SIERRA MADRE DE (OR IN) TEPIC. See Sierra Madre Occidental.

SIERRA MADRE MOUNTAINS, MÉXICO. This name could refer to either the Sierra Madre Occidental or the Sierra Madre Oriental (*q. v.*).

SIERRA MADRE OCCIDENTAL, MÉXICO. Great western mountain range of México, extending from eastern Sonora and western Chihuahua southward through Nayarit, Durango, and Zacatecas to northern Jalisco. It is commonly cited in the "Biologia" as "Sierra Madre" or "Sierra" with mention of a particular state. For a description, see Goldman (1951, pp. 301-302).

SIERRA MADRE ORIENTAL, MÉXICO. Principal eastern mountain range of México, extending from southern Coahuila and southern Nuevo León southward through San Luis Potosí, Guanajuato, Querétaro, Hidalgo, Puebla, and Veracruz to eastern Oaxaca. For a description, see Goldman (1951, pp. 303-304).

SIERRA NEVADA DE COLIMA = Nevado de Colima, Jalisco, México. Volcanic mountain near the border of Colima; summit at 14,235 feet;  $19^{\circ} 33'$ ,  $103^{\circ} 38'$ .

SIERRA NOLA, MÉXICO. Not located.

SIERRA SAN LÁZARO, BAJA CALIFORNIA SUR, MÉXICO. Mountain range in the cape region;  $23^{\circ} 14'$ ,  $109^{\circ} 49'$ .

SILAO, GUANAJUATO, MÉXICO. Town in western Guanajuato; 5864 feet;  $20^{\circ} 56'$ ,  $101^{\circ} 26'$ .

SINALOA, MÉXICO. State on the Pacific coast. Also a town [Sinaloa (de Leyva)] in the northern part of the state;  $25^{\circ} 50'$ ,  $108^{\circ} 14'$ .

SINANJÁ = Sinamjá, Baja Verapaz, Guatemala. Small settlement in the north-eastern corner of Baja Verapaz about 17 km. east of Purulhá. The Río Sinamjá is a tributary of the Río Polochic;  $15^{\circ} 12'$ ,  $90^{\circ} 04'$ .

SINANJÁ RIVER VALLEY. See Sinamjá.

SIQUIRRES, LIMÓN, COSTA RICA. Town on the railroad about 30 km. northeast of Turrialba;  $10^{\circ} 06'$ ,  $83^{\circ} 30'$ .

SIXOLA RIVER = Río Sixaola, Limón, Costa Rica. Large river in the south-eastern part of the republic flowing along the border of Panamá into the Caribbean Sea;  $9^{\circ} 35'$ ,  $82^{\circ} 34'$ .

SOCHITEPEC, MORELOS, MÉXICO. Not located.

SOLCO, MÉXICO. Not located.

SOLDADO CAÑON = Arroyo Soldado, Chihuahua, México. Canyon in northwestern Chihuahua near Pacheco and about 125 km. southwest of Nuevo Casas Grandes;  $4000 \pm$  feet;  $30^{\circ} 04'$ ,  $108^{\circ} 14'$ .

SOLEDAD, GUERRERO, MÉXICO. Not identified. There are several settlements of this name (and La Soledad) in Guerrero.

SOLEDAD, VERACRUZ, MÉXICO. This is probably the railroad station of Soledad de Doblado (shown on "Biologia" Map 5 as Soledad) 32 km. southwest of the city of Veracruz;  $19^{\circ} 03'$ ,  $96^{\circ} 25'$ .

SOLOLÁ, SOLOLÁ, GUATEMALA. Town a few kilometers north of Lago de Atitlán and overlooking the lake; 6900 feet;  $14^{\circ} 46'$ ,  $91^{\circ} 11'$ .

SOLTEPEC, MÉXICO. Not identified. There is a village of this name in Puebla (30 km. southeast of Huamantla) and one in Tlaxcala (28 km. northwest of Apizaco).

SONGORA, MÉXICO. Not located.

SONORA, MÉXICO. State in northwestern México. Calvert (Neuroptera, p. 104, footnote) cites remarks of Schwarz to the effect that insects collected by Morrison and sent abroad and incorporated in the "Biologia" under the label "Sonora" were actually collected in Arizona (Graham Mountains, near

- Fort Grant, and above Fort Huachuca). Schwarz also states that material from these same localities was properly labeled "Arizona" when sent to American workers. Remarks of Horn (1886) support those of Schwarz.
- SONSONATE, SONSONATE, EL SALVADOR. Capital of the department, about 48 km. west of San Salvador;  $13^{\circ} 43'$ ,  $89^{\circ} 44'$ .
- SONTECOMAPAN, VERACRUZ, MÉXICO. Ranch on the edge of the Laguna Coxcoapan 19 km. north-northeast of San Andrés Tuxtla;  $18^{\circ} 30'$ ,  $95^{\circ} 02'$ .
- ST. JOSEPH I[SLAND]. See San José Island.
- SUAPAN, MÉXICO. Not located.
- SUERRE, LIMÓN, COSTA RICA. Settlement near the Caribbean coast on the Río Jiménez midway between Puerto Limón and the southern border of Nicaragua;  $10^{\circ} 18'$ ,  $83^{\circ} 25'$ .
- SURUBRES, ALAJUELA, COSTA RICA. In the "Biologia," Champion (Coleoptera, vol. 4, pt. 3, p. 234) says that the locality is "near San Mateo, 250 metres, Pacific Slope." (See San Mateo.)
- TABAGO I[SLAND]. See Taboga Island.
- TABASCO, MÉXICO. State in southern México.
- TABERNILLA, CANAL ZONE, PANAMÁ. Former station on the trans-isthmian railroad south of Frijoles;  $9^{\circ} 10'$ ,  $79^{\circ} 48'$ .
- TABÍ, YUCATÁN, MÉXICO. Not identified. There are two settlements of this name in Yucatán ( $20^{\circ} 15'$ ,  $99^{\circ} 35'$  and  $20^{\circ} 34'$ ,  $88^{\circ} 56'$ ).
- TABLAZO, COSTA RICA. See El Tablazo.
- TABLAZO, MÉXICO. Not located.
- TABLELANDS. See Los Altos.
- TABOGA ISLAND = Isla Taboga, Panamá, Panamá. Small island in Bahía de Panamá about 20 km. south of the city of Panamá;  $8^{\circ} 47'$ ,  $79^{\circ} 34'$ .
- TABOGILLA ISLAND = Isla Taboguilla, Panamá, Panamá. Island about 5 km. northeast of Isla Taboga;  $8^{\circ} 48'$ ,  $79^{\circ} 31'$ .
- TABOGO ISL[AND]. See Taboga Island.
- TACÁMBARO, MICHOACÁN, MÉXICO. Village 53 km. southwest of Morelia; 5173 feet;  $19^{\circ} 14'$ ,  $101^{\circ} 28'$ .
- TACOTALPA, TABASCO, MÉXICO. Village on the Río Tacotalpa in southeastern Tabasco 44 km. south-southeast of Villahermosa;  $17^{\circ} 36'$ ,  $92^{\circ} 49'$ .
- TACTIC, ALTA VERAPAZ, GUATEMALA. Railroad town on the Río Polochic about 15 km. southeast of Cobán; 4300 feet;  $15^{\circ} 20'$ ,  $90^{\circ} 18'$ .
- TACUBA, DISTRITO FEDERAL, MÉXICO. Northern suburb of the city of México; 7380 feet;  $28^{\circ} 03'$ ,  $107^{\circ} 07'$ .
- TACUBAYA, DISTRITO FEDERAL, MÉXICO. Southwestern suburb of the city of México; 7350 feet;  $19^{\circ} 24'$ ,  $99^{\circ} 12'$ .
- TAKUBAYA. See Tacubaya.
- TALAMANCA, COSTA RICA. According to Hooper (1952, pp. 222-223), this is "a name applied to the whole southeastern part of Costa Rica from the Caribbean Sea to the crest of the Cordillera de Talamanca"; this mountain range is at  $9^{\circ} 30'$ ,  $83^{\circ} 40'$ .
- TAMAHÚ, ALTA VERAPAZ, GUATEMALA. Village along the railroad and the Río Polochic about 23 km. southeast of Cobán;  $2250 \pm$  feet;  $15^{\circ} 20'$ ,  $90^{\circ} 14'$ .
- TAMAULIPAS, MÉXICO. State in northwestern México.
- TAMPICO, TAMAULIPAS, MÉXICO. Major Atlantic port on the border of Veracruz;  $22^{\circ} 13'$ ,  $97^{\circ} 51'$ .

TANETZA. See Tanetze.

TANETZE, OAXACA, MÉXICO. Village 57 km. northeast of the city of Oaxaca; 17° 23', 96° 18'.

TAPACHULA, CHIAPAS, MÉXICO. Town in extreme southern Chiapas near the border of Guatemala; 14° 54', 92° 17'.

TARBACA, SAN JOSÉ, COSTA RICA. Settlement on the highway about 11 km. southwest of San José; 4000± feet; 9° 50', 84° 06'.

TARETÁN, MICHOACÁN, MÉXICO. Village in central Michoacán 32 km. southeast of Uruapan; 1500± feet; 19° 20', 101° 55'.

TASCO. See Taxco.

TAXCO, GUERRERO, MÉXICO. Town in northern Guerrero north of Iguala; 5740 feet; 18° 33', 99° 36'.

TEAPA, TABASCO, MÉXICO. Town in southeastern Tabasco 48 km. south of Villahermosa; 17° 33', 92° 57'.

TEATANGO, MÉXICO. Not located.

TECALCO, PUEBLA, MÉXICO. Not located. The gazetteer of the United States Board on Geographic Names (1956) lists two settlements of this name in the state of México.

TECOMAVACA, OAXACA, MÉXICO. Railroad station in northern Oaxaca 18 km. northwest of Cuicatlán; 1861 feet; 17° 58', 97° 01'.

TECPÁN. See Tecpán.

TECPÁN, CHIMALTENANGO, GUATEMALA. Town in the mountains 15 km. northwest of Chimaltenango; 7500± feet; 14° 46', 91° 00'.

TEHUACÁN, PUEBLA, MÉXICO. Large town in the southeastern part of the state; 5509 feet; 18° 27', 97° 23'.

TEHUANTEPEC, MÉXICO. This name may refer to the city of Tehuantepec, Oaxaca; the Istmo de Tehuantepec, which includes part of Oaxaca and Veracruz; or the district of Tehuantepec, Oaxaca. Brodtkorb (1942) says that "Tehuantepec, based on Sumichrast material, probably refers to the district and not to the town. When he meant the town Sumichrast apparently invariably wrote Tehuantepec City."

TEJERÍA, VERACRUZ, MÉXICO. Railroad station 10 km. west of the city of Veracruz; 19° 11', 96° 14'.

TEKANTO, YUCATÁN, MÉXICO. Village on the railroad between Mérida and Izamal and 11 km. northwest of the latter; 21° 01', 89° 06'.

TELEMÁN, ALTA VERAPAZ, GUATEMALA. Settlement between Panzós and La Tinta in the valley of the Río Polochic about 8 km. west of Panzós; 15° 23', 89° 50'.

TEMASH RIVER, TOLEDO, BRITISH HONDURAS. River in the extreme south of British Honduras flowing eastward to the Caribbean Sea parallel to the Sarstoon River; 15° 59', 88° 55'.

TEMAX, YUCATÁN, MÉXICO. Railroad town 26 km. northeast of Izamal; 21° 09', 88° 56'.

TEMPICO. See Tampico.

TENANCINGO, MÉXICO, MÉXICO. Town in the southwestern part of the state of México; 8000± feet; 18° 58', 99° 36'.

TENANGO DEL VALLE = Tenango, México, México. Town 22 km. southeast of Toluca; 4800± feet; 19° 07', 99° 33'.

TENEJAPAM, MÉXICO. Not identified. There are several settlements of the name

- Tenejapan or Tenejapa in México. The most accessible of these and perhaps the one referred to in the "Biología" is about 7 km. south of Orizaba, Veracruz ( $18^{\circ} 47'$ ,  $97^{\circ} 05'$ ).
- TENOSIQUE, TABASCO, MÉXICO. Village on the Río Usumacinta in eastern Tabasco;  $17^{\circ} 29'$ ,  $91^{\circ} 26'$ .
- TEOCELO, VERACRUZ, MÉXICO. Railroad terminal 16 km. south-southwest of Jalapa; 2995 feet;  $19^{\circ} 23'$ ,  $96^{\circ} 58'$ .
- TEOPISCA, CHIAPAS, MÉXICO. Village on the highway 30 km. southeast of San Cristóbal de las Casas;  $5000 \pm$  feet;  $16^{\circ} 31'$ ,  $92^{\circ} 29'$ .
- TEPAN. See Tecpán.
- TEPANISTLAHUACA, OAXACA, MÉXICO. Settlement shown on "Biología" Map 5 (as Tepenistlahuaca) about 16 km. west of Panistlahuaca; approximately  $16^{\circ} 01'$ ,  $97^{\circ} 32'$ .
- TEPANSACUALCO. See Tepanzacoalco.
- TEPANZACOALCO = Tepamacoalco, Oaxaca, México. Village 76 km. southeast of Cuicatlán and 62 km. northeast of the city of Oaxaca;  $6500 \pm$  feet;  $17^{\circ} 24'$ ,  $96^{\circ} 22'$ .
- TEPEHUANES, DURANGO, MÉXICO. Railroad terminal in western central Durango; 5865 feet;  $25^{\circ} 21'$ ,  $105^{\circ} 44'$ . The name appears on some maps as Santa Catarina Tepehuanes.
- TEPETLAPA, GUERRERO, MÉXICO. Settlement on the railroad line 25 km. northeast of Iguala; 3000 feet;  $18^{\circ} 33'$ ,  $99^{\circ} 25'$ .
- TEPIC, NAYARIT, MÉXICO. Capital of the state of Nayarit and also a former name for the state; 3034 feet;  $21^{\circ} 30'$ ,  $104^{\circ} 54'$ . The city is sometimes listed in the "Biología" as in the state of Jalisco.
- TERETÁN. See Taretán.
- TERRARAS, CHIHUAHUA, MÉXICO. Not located. This is possibly a misprint of Terrazas, a railroad station 40 km. northwest of the city of Chihuahua;  $6000 \pm$  feet;  $28^{\circ} 57'$ ,  $106^{\circ} 16'$ .
- TESTUACO = Tecuaco or San Juan Tecuaco, Santa Rosa, Guatemala. This is probably the town near the eastern border of the department of Santa Rosa 10 km. east of Chiquimulilla;  $14^{\circ} 05'$ ,  $90^{\circ} 16'$ .
- TETAMOA = Tetainoa, Chihuahua, México. Settlement in extreme western Chihuahua 66 km. north-northwest of the point where the border between Sonora and Sinaloa meets the border of Chihuahua;  $5000 \pm$  feet;  $27^{\circ} 32'$ ,  $108^{\circ} 37'$ .
- TEXOLO, VERACRUZ, MÉXICO. Waterfalls near Jico, which is 15 km. southwest of Jalapa;  $5000 \pm$  feet;  $19^{\circ} 25'$ ,  $97^{\circ} 00'$ .
- TIERRA BLANCA, CARTAGO, COSTA RICA. Village on the southern slope of Volcán de Irazú about 5 km. northeast of Cartago;  $6500 \pm$  feet;  $9^{\circ} 55'$ ,  $83^{\circ} 53'$ .
- TIERRA CALIENTE, MÉXICO. General term applied to the tropical lowlands.
- TIERRA COLORADO, GUERRERO, MÉXICO. Village on the highway 42 km. south of Chilpancingo; 1000 feet;  $17^{\circ} 10'$ ,  $99^{\circ} 35'$ .
- TIERRA FRÍA, MÉXICO. General term applied to the non-tropical uplands.
- TINGAMBATO, MICHOACÁN, MÉXICO. Village 15 km. northeast of Uruapan;  $6500 \pm$  feet;  $19^{\circ} 30'$ ,  $101^{\circ} 52'$ .
- TINTÍN, DARIÉN, PANAMÁ. Small river shown in Festa (1909, map 48) in the northwestern part of the province as Tintín Q[uebrado]; it flows into the Río Areti at La Delicia, which is 12 or 13 km. northeast of La Palma; about

8° 35', 78° 07'.

TIPITAPA, MANAGUA, NICARAGUA. Settlement on the highway at the southeastern corner of Lago de Managua; 12° 12', 86° 06'.

TIXTLA, GUERRERO, MÉXICO. Town 12 km. northeast of Chilpancingo; 4554 feet; 17° 35', 99° 26'.

TIZAPAN, DISTRITO FEDERAL, MÉXICO. Not located. This is a Barrett locality; the elevation is given as 7500 feet.

TLACOTALPAM. See Tlacotalpan.

TLACOTALPAN, VERACRUZ, MÉXICO. Town in southern Veracruz between the city of Veracruz and San Andrés Tuxtla; 18° 37', 95° 40'.

TLALNEPANTLA, DISTRITO FEDERAL, MÉXICO. Town on the railroad north of the city of México; 7428 feet; 19° 33', 99° 11'.

TLALPAM. See Tlalpan.

TLALPAN, DISTRITO FEDERAL, MÉXICO. Town just south of the city of México; 7500± feet; 19° 17', 99° 10'.

TLALTIZAPÁN, MORELOS, MÉXICO. Railroad station 30 km. south-southeast of Cuernavaca; 3000± feet; 18° 41', 99° 07'.

TLAPACOYAN, MÉXICO. Not identified. There are settlements of this name in the states of Hidalgo, México, Puebla, and Veracruz. The largest of these is a town in Veracruz 22 km. northeast of Teziutlán, Puebla (19° 58', 97° 13').

TLATINGO, MÉXICO. Not located.

TLATLECOPE, MÉXICO. Not located.

TLICTOPEC, VERACRUZ, MÉXICO. Not located.

TOCOY, EL PROGRESO [formerly Jalapa], GUATEMALA. Settlement shown on "Biologia" Map 8 about 15 km. southeast of Salamá and not far north of the Río Motagua; 2000± feet; 14° 57', 90° 09'.

TODOS SANTOS, BAJA CALIFORNIA SUR, MÉXICO. Village in the cape region near the Pacific coast; 23° 27', 110° 13'.

TOLÉ, CHIRIQUÍ, PANAMÁ. Village on the Pacific slope about 15 km. west of the border of Veraguas Province; 1150 feet; 8° 14', 81° 41'.

TOLIMÁN. See San Lucas Tolimán.

TOLOSA, OAXACA, MÉXICO. Railroad station on the trans-isthmian line 84 km. north of Juchitán; 17° 12', 95° 03'.

TOLUCA, MÉXICO, MÉXICO. Capital of the state of México; 8659 feet; 19° 17', 99° 40'.

TOMASULAPAM = Tamazulapan, Oaxaca, México. Town on the Pan-American Highway in northern Oaxaca; 7000± feet; 17° 41', 97° 34'.

TOMATLÁN, MÉXICO. Not identified. This locality is cited in the "Biologia" with Veracruz localities and is probably the railroad station of Tomatlán in Veracruz 19 km. southeast of Córdoba. There are, however, settlements of the same name in the states of Jalisco, Michoacán, and Puebla.

TOMOTLA, MÉXICO. Not located.

TONALAPA, GUERRERO, MÉXICO. Village 26 km. south of Iguala; 2700 feet; 18° 06', 99° 34'.

TONILA, JALISCO, MÉXICO. Village near the border of Colima 25 km. northeast of the city of Colima, Colima; 4000± feet; 19° 26', 103° 31'. The locality is cited as in Colima in the "Biologia" and appears within the border of Colima on some maps.

TOROLO, ESCUINTLA, GUATEMALA. Settlement 6 km. east of Escuintla; 1000 feet;

shown on "Biologia" Map 8 at about  $14^{\circ} 14'$ ,  $90^{\circ} 42'$ .

TORREÓN, COAHUILA, MÉXICO. Important city on the border of Durango in southern Coahuila; 3789 feet;  $25^{\circ} 33'$ ,  $103^{\circ} 26'$ .

TOSONGO, MÉXICO. Not located.

TOTONICAPÁM = Totonicapán, Totonicapán, Guatemala. Town in the southern part of the department on the highway about 20 km. northwest of Lago de Atitlán;  $10,000 \pm$  feet;  $14^{\circ} 54'$ ,  $91^{\circ} 22'$ .

TOTOSINAPAN, MÉXICO. Not located.

TOXPAM, MÉXICO. Not located. The locality is given once in the "Biologia" as "Toxpam near Cordova" and elsewhere is cited frequently with Veracruz localities. It is possibly an error for Tuxpan, Veracruz (*q. v.*).

TRAPICHE, MÉXICO. Not identified. There are several villages of this name in México.

TRECE AGUAS, ALTA VERAPAZ, GUATEMALA. Large tract of land on the Atlantic slope extending from near Panzós on the east to Senahú on the west; it includes Trece Aguas itself and a substation of this plantation called Cacao;  $15^{\circ} 25'$ ,  $89^{\circ} 47'$ .

TRES MARÍAS, MORELOS, MÉXICO. Railroad station on the northern slope of the mountains between Cuernavaca and the city of México 15 km. north of Cuernavaca;  $9000 \pm$  feet;  $19^{\circ} 03'$ ,  $99^{\circ} 13'$ .

TRES MARÍAS ISLANDS. See *Islas Tres Marías*.

TRES RÍOS, CARTAGO, COSTA RICA. Town in the highlands 10 km. southeast of San José on the Pan-American Highway;  $9^{\circ} 54'$ ,  $83^{\circ} 58'$ .

TRINIDAD RIVER = Río Trinidad, Panamá, Panamá. River west of La Chorrera, rising near the Cerro Trinidad and flowing northward into Gatún Lake; about  $8^{\circ} 50'$ ,  $80^{\circ} 00'$ .

TROJOS DE ORO = Trojes de Oro, México. Not located.

TRUXILLO = Trujillo, Colón, Honduras. Coastal city and capital of Colón, at about the center of the northern coast;  $15^{\circ} 55'$ ,  $86^{\circ} 00'$ .

TUCURRIQUE, CARTAGO, COSTA RICA. Small town on the Río Reventazón about 22 km. east of Cartago and slightly southwest of Turrialba;  $9^{\circ} 51'$ ,  $83^{\circ} 43'$ .

TUCURRIQUÍ. See *Tucurrique*.

TUCURÚ = San Miguel Tukurú, Alta Verapaz, Guatemala. Town on the railroad along the Río Polochic about 22 km. southeast of Cobán;  $2000 \pm$  feet;  $15^{\circ} 19'$ ,  $90^{\circ} 07'$ .

TUIS, CARTAGO, COSTA RICA. Town about 11 km. southeast of Turrialba;  $9^{\circ} 51'$ ,  $83^{\circ} 35'$ .

TULA, HIDALGO, MÉXICO. Town on the railroad 67 km. west of Pachuca;  $6000 \pm$  feet;  $20^{\circ} 03'$ ,  $99^{\circ} 21'$ .

TULANCINGO, HIDALGO, MÉXICO. Town 37 km. east of Pachuca;  $8000 \pm$  feet;  $20^{\circ} 05'$ ,  $98^{\circ} 22'$ .

TULARE, MÉXICO. Not located.

TULTENANGO, MÉXICO, MÉXICO. Railroad station near the border of Michoacán 11 km. northeast of Oro de Hidalgo;  $9000 \pm$  feet;  $19^{\circ} 51'$ ,  $100^{\circ} 03'$ .

TULTEPEC, MÉXICO, MÉXICO. Railroad station about 12 km. south of Zumpango;  $7000 \pm$  feet;  $19^{\circ} 40'$ ,  $99^{\circ} 07'$ .

TUMBALÁ, CHIAPAS, MÉXICO. Village in northern Chiapas 17 km. south of Salto de Agua; 5244 feet;  $17^{\circ} 18'$ ,  $92^{\circ} 19'$ .

TUPÁTARO, GUANAJUATO, MÉXICO. Village 30 km. southwest of Irapuato;  $6000 \pm$

feet;  $20^{\circ} 36'$ ,  $101^{\circ} 38'$ .

TURICATO, MICHOACÁN, MÉXICO. Village in central Michoacán 21 km. south-southeast of Tacámbaro; 2622 feet;  $18^{\circ} 53'$ ,  $101^{\circ} 20'$ .

TURRIALBA, CARTAGO, COSTA RICA. Town in the eastern part of the province on the highway about 34 km. east of Cartago;  $2000 \pm$  feet;  $9^{\circ} 54'$ ,  $83^{\circ} 41'$ .

TURUBARES = Cerro Turrubares, San José, Costa Rica. Mountain on the Pacific slope about 8 km. southwest of San Pedro de Turrubares;  $9^{\circ} 47'$ ,  $84^{\circ} 28'$ .

TUSPAN. See Tuxpan, Veracruz.

TUTEPEC, MÉXICO. Not located. There is a Tutopec (or San Pedro Tutupec) near the Río Verde in southwestern Oaxaca ( $16^{\circ} 09'$ ,  $97^{\circ} 38'$ ). There is also a Tuxtepec, Oaxaca (*q. v.*).

TUXPAN, JALISCO, MÉXICO. Village 20 km. southeast of Ciudad Guzmán; 4062 feet;  $19^{\circ} 33'$ ,  $103^{\circ} 24'$ .

TUXPAN, VERACRUZ, MÉXICO. Where the state of Jalisco is not specified in the "Biología," Tuxpan (or Tuspan) very probably refers to the coastal town of Tuxpan in northern Veracruz;  $20^{\circ} 57'$ ,  $97^{\circ} 24'$ .

TUXPANGO, VERACRUZ, MÉXICO. Settlement 10 km. southeast of Orizaba;  $4000 \pm$  feet;  $18^{\circ} 49'$ ,  $97^{\circ} 01'$ .

TUXTEPEC, OAXACA, MÉXICO. Town near the border of Veracruz 128 km. northwest of the city of Oaxaca;  $18^{\circ} 06'$ ,  $96^{\circ} 07'$ .

TUXTLA, GUERRERO, MÉXICO. Settlement or collecting site visited by Smith in 1888 and described in the "Biología" (Neuroptera, p. xi) as near Amula (*q. v.*). It does not appear on any maps consulted.

TUXTLA, SAN ANDRÉS. See San Andrés Tuxtla.

TUXTLA, VERACRUZ. See San Andrés Tuxtla.

TUZANTLA, MICHOACÁN, MÉXICO. Village shown on the "Map of Hispanic America" (American Geographical Society, 1944) near the border of the state of México 49 km. south-southwest of Zitácuaro;  $2000 \pm$  feet;  $18^{\circ} 57'$ ,  $100^{\circ} 30'$ . The United States Board on Geographic Names (1956) gives the coordinates as  $19^{\circ} 03'$ ,  $100^{\circ} 24'$ .

TUZUMAPA, MÉXICO. Not located.

URES, SONORA, MÉXICO. Village on the Río Sonora 66 km. northeast of Hermosillo;  $1500 \pm$  feet;  $29^{\circ} 26'$ ,  $110^{\circ} 24'$ .

URUÁCHIC, CHIHUAHUA, MÉXICO. Village in western Chihuahua 105 km. north of the meeting point of the borders of Sonora, Sinaloa, and Chihuahua;  $6000 \pm$  feet;  $27^{\circ} 52'$ ,  $108^{\circ} 14'$ .

URUAPAM. See Uruapan.

URUAPAN, MICHOACÁN, MÉXICO. City in central Michoacán; 5500 feet;  $19^{\circ} 25'$ ,  $101^{\circ} 58'$ . The official name is Uruapan del Progreso.

VALLADOLID, YUCATÁN, MÉXICO. City in eastern Yucatán;  $20^{\circ} 41'$ ,  $88^{\circ} 12'$ .

VALLE DE BARÚ, SAN JOSÉ, COSTA RICA. Valley of Barú, which is a settlement on the Río Barú in the southern part of San José about 10 km. from the coast;  $9^{\circ} 20'$ ,  $83^{\circ} 47'$ .

VALLE DE HUAMUXTITLÁN, GUERRERO, MÉXICO. Huamuxtitlán is a village on the Río Tlapaneco in the northeastern corner of Guerrero 100 km. east-northeast of Chilpancingo;  $4000 \pm$  feet;  $17^{\circ} 49'$ ,  $98^{\circ} 34'$ .

VALLE DE MAÍZ, MÉXICO. Not located. This is a Palmer place name, possibly referring to the valley in extreme eastern San Luis Potosí in which the town of Ciudad del Maíz is located ( $22^{\circ} 24'$ ,  $99^{\circ} 36'$ ).



VALLE DEL MAÍS. See Valle de Maís.

VALLE DU DIGUIS. See Diquis Valley.

VALLE REAL, MÉXICO. Not located.

VALLES, SAN LUIS POTOSÍ, MÉXICO. Town on the Pan-American Highway in eastern San Luis Potosí;  $21^{\circ} 59'$ ,  $99^{\circ} 01'$ . The official name of Ciudad de Valles is commonly used.

VALLEY OF MEXICO = Valle de México, Distrito Federal, México. Large basin in which the city of México is located;  $19^{\circ} 24'$ ,  $99^{\circ} 09'$ .

VARA BLANCA, HEREDIA, COSTA RICA. Hacienda and village near the border of Alajuela Province about 18 km. north of Heredia; 5300 feet;  $10^{\circ} 10'$ ,  $84^{\circ} 09'$ .

VENTA DE PELEGRINO. See Venta de Peregrino.

VENTA DE PEREGRINO, GUERRERO, MÉXICO. Resting place on the Río Papagayo 11 km. southwest of Tierra Colorada and 45 km. northeast of Acapulco; 1500± feet;  $17^{\circ} 05'$ ,  $99^{\circ} 34'$ .

VENTA DE ZOPILOTE, GUERRERO, MÉXICO. Shelter house near the southern end of the Cañon de Zopilote 22 km. north of Chilpancingo; 2800 feet;  $17^{\circ} 46'$ ,  $99^{\circ} 32'$ . (See Gadow, 1906, p. 358.)

VENTANAS = Villa Corona, Durango, México. Village on the Río del Presidio 115 km. west-southwest of the city of Durango, Durango, and 100 km. northeast of Mazatlán, Sinaloa; 2046 feet;  $23^{\circ} 52'$ ,  $105^{\circ} 47'$ .

VERACRUZ, MÉXICO. As used in the "Biología," the name Veracruz probably usually refers to the Atlantic port and largest city in the state of Veracruz ( $19^{\circ} 12'$ ,  $96^{\circ} 08'$ ). In a few places either the city or the state is specified.

VERA CRUZ CITY. See Veracruz.

VERAGUA = Veraguas, Panamá. Large western province.

VERA PAZ = Alta Verapaz or Baja Verapaz, Guatemala. Former large department now divided into two departments.

VICTORIA. See Ciudad Victoria.

VILLA ALTA, OAXACA, MÉXICO. Village 72 km. northeast of the city of Oaxaca; 4000± feet;  $17^{\circ} 21'$ ,  $96^{\circ} 09'$ .

VILLA LERDO = Ciudad Lerdo, Durango, México. Large town near the eastern border of the state of Durango just southwest of Gómez Palacio; 3746 feet;  $25^{\circ} 23'$ ,  $103^{\circ} 32'$ .

VILLE DE MEXIQUE. See México.

VIRGIN BAY, NICARAGUA. Not located.

VOLCÁN DE ACATENANGO, SACATEPÉQUEZ AND CHIMALTENANGO, GUATEMALA. Large volcano 18 km. southwest of Antigua; summit at 12,992 feet;  $14^{\circ} 29'$ ,  $90^{\circ} 52'$ .

VOLCÁN DE AGUA, SACATEPÉQUEZ AND ESCUINTLA, GUATEMALA. Large volcano about 11 km. south of Antigua; summit at 12,382 feet;  $14^{\circ} 27'$ ,  $90^{\circ} 50'$ . The locality is occasionally listed in the "Biología" for México or Panamá.

VOLCÁN DE ATITÁN. See Volcán de Atitlán.

VOLCÁN DE ATITLÁN, SOLOLÁ AND SUCHITEPÉQUEZ, GUATEMALA. Large volcano 8 km. south of Lago de Atitlán; summit at 11,564 feet;  $14^{\circ} 34'$ ,  $91^{\circ} 11'$ . The locality is listed erroneously for México in some cases in the "Biología."

VOLCÁN DE BARBA, HEREDIA, COSTA RICA. Extinct volcano southeast of Volcán de Poás and 12 km. north of Heredia; summit at 9610 feet;  $10^{\circ} 08'$ ,  $84^{\circ} 06'$ .

VOLCÁN DE CHIRIQUÍ, CHIRIQUÍ, PANAMÁ. Volcano in extreme northeastern Chiriquí about 16 km. east of the border of Costa Rica; summit at 11,410 feet;

8° 48', 82° 36'.

VOLCÁN DE FUEGO, SACATEPÉQUEZ AND CHIMALTENANGO, GUATEMALA. Large volcano 20 km. southwest of Antigua; summit at 12,929 feet; 14° 28', 90° 57'.

VOLCÁN DE IRAZÚ, CARTAGO, COSTA RICA. Volcano about 25 km. northeast of San José; summit at 11,260 feet; 9° 58', 83° 53'.

VOLCÁN DE IXTACCÍHUATL. See Ixtaccíhuatl.

VOLCÁN DE JORULLO, MICHOACÁN, MÉXICO. Volcano 53 km. southeast of Uruapan; summit at 4330 feet; 18° 59', 101° 43'.

VOLCÁN DE ORIZABA. See Pico de Orizaba.

VOLCÁN DE POÁS, ALAJUELA, COSTA RICA. Westernmost mountain of the volcanic chain in central Costa Rica, 15 km. north of the city of Alajuela; summit at 9055 feet; 10° 11', 84° 13'.

VOLCÁN DE POPOCATÉPETL. See Popocatepetl.

VOLCÁN DE SAN MIGUEL, SAN MIGUEL, EL SALVADOR. Volcano on the southern coast southwest of San Miguel; summit at 6994 feet; 13° 26', 88° 16'.

VOLCÁN DE SANTA MARÍA, QUEZALTENANGO, GUATEMALA. Large volcano 10 km. southwest of Quezaltenango; summit at 12,313 feet; 14° 44', 91° 33'.

VOLCÁN DE TURRIALBA, CARTAGO, COSTA RICA. Extinct volcano about 14 km. northwest of Turrialba at the eastern end of the volcanic chain of Costa Rica; summit at 11,100 feet; 10° 02', 83° 46'.

VOLCÁN IXTACCÍHUATL. See Ixtaccíhuatl.

XAUTIPA, GUERRERO, MÉXICO. Not located.

XCOLAK, YUCATÁN, MÉXICO. Not located. There is a Xkoluk (= Xkolub) in Yucatán 9 km. northeast of Temax (21° 11', 88° 50').

XICO = Jico, Veracruz, MÉXICO. Railroad terminal 16 km. southwest of Jalapa; 4340 feet; 19° 25', 97° 00'.

XUCUMANATLÁN, GUERRERO, MÉXICO. This locality is described in the "Biologia" (Neuroptera, p. xi) as a "small settlement 2 miles north of Omilteme and essentially the same"; the elevation is given as 7000 feet. See Omilteme.

YANTEPEC. See Yautepec.

YAQUI RIVER = Río Yaqui, Sonora, México. Important river rising (as the Río Papigochic) in western Chihuahua, flowing through eastern and southern Sonora, and emptying into the Golfo de California south of Guaymas at 27° 37', 110° 39'.

YAUTEPEC, MORELOS, MÉXICO. City east of Cuernavaca; 3800 feet; 18° 53', 99° 04'.

YOLOS, OAXACA, MÉXICO. Not identified. The "Biologia" place name Yolos probably refers to the settlement of Yolox in the Sierra de las Mixtecas about 100 km. northwest of the city of Oaxaca (17° 37', 97° 31') (Vaurie, 1958, p. 291). An alternate but less likely locality is Yolo, near the Pacific coast about 100 km. south-southwest of the city of Oaxaca (16° 15', 97° 11').

YOLOTEPEC, OAXACA, MÉXICO. Village 86 km. southwest of the city of Oaxaca; 5500± feet; 16° 52', 97° 30'.

YUCATÁN, MÉXICO. Southern state.

YURÉCUARO, MICHOACÁN, MÉXICO. Town on the railroad 42 km. east of Lago de Chapala; 6000± feet; 20° 20', 102° 18'.

YZABAL. See Izabal.

ZACAPA, ZACAPA, GUATEMALA. Large railroad junction in the valley of the Río Motagua about midway between Puerto Barrios and the city of Guatemala;

- 738 feet; 14° 59', 89° 31'.
- ZACATECAS, ZACATECAS, MÉXICO. Capital of the state; 7377 feet; 22° 47', 102° 35'.
- ZACATECAS CITY. See Zacatecas.
- ZACUALTIPÁN, HIDALGO, MÉXICO. Village near the border of Veracruz 60 km. north-northeast of Pachuca; 6000± feet; 20° 39', 98° 36'.
- ZACULPAN, MÉXICO, MÉXICO. Village near the border of Guerrero 65 km. south of Toluca; 8000± feet; 18° 43', 99° 47'.
- ZAMORA, MÉXICO. Not identified. The locality in question is probably the town of Zamora in northwestern Michoacán; 5171 feet; 19° 59', 102° 16'. There are, however, several other settlements of the same name in México.
- ZAPOCAN, JALISCO, MÉXICO. Village 7 km. northwest of Guadalajara; 5247 feet; 20° 43', 103° 24'.
- ZAPOTE. See El Zapote.
- ZAPOTES. See El Zapote.
- ZAPOTLÁN = Ciudad Guzmán, Jalisco, México. City on the Laguna Zapotlán 112 km. south of Guadalajara; 5016 feet; 19° 45', 103° 30'. The locality is sometimes cited as in Colima in the "Biologia." (See Hooper, 1952, p. 247.)
- ZARZERO = Zarcero, Alajuela, Costa Rica. Town in the southeastern part of Alajuela on the highway about 10 km. north of Naranjo; 6600 feet; 10° 11', 84° 23'.
- ZEMPOALTEPEC = Cerro Zempoaltepec, Oaxaca, México. Mountain in eastern central Oaxaca 80 km. east of the city of Oaxaca; summit at 11,138 feet; 17° 10', 95° 59'.
- ZENT DISTRICT = Zent, Limón, Costa Rica. Settlement on the railroad about 30 km. west of Puerto Limón, on the Atlantic slope; 10° 02', 83° 16'.
- ZEUT. See Zent District.
- ZIMAPÁN, HIDALGO, MÉXICO. Mining town in the northwestern part of the state; 6410 feet; 20° 45', 99° 21'.
- ZINAPÉCUARO, MICHOACÁN, MÉXICO. Town in extreme eastern Michoacán 10 km. southeast of the eastern tip of Lago de Cuitzeo; 5500± feet; 19° 52', 100° 49'.
- ZONGOLICA, VERACRUZ, MÉXICO. Town 26 km. south of Córdoba; 4000± feet; 18° 40', 96° 59'.
- ZUMPANGO = Sumpango, Sacatepéquez, Guatemala. Town on the highway 10 km. east of Chimaltenango; 6000 feet; 14° 37', 90° 43'.

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